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Water Supply Outlook For

Oregon





SOIL CONSERVATION SERVICE U.S. DEPARTMENT OF AGRICULTURE

Cooperating with

OREGON DEPARTMENT OF WATER RESOURCES

FEB. 1, 1980

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: THE SNOTEL PROJECT CENTRAL COMPUTER FACILITIES IN PORTLAND, OREGON. THE TERMINAL, PRINTER, COMPUTER AND TAPE DRIVES HAVE NOT COMPLETELY REPLACED THE SNOW SAMPLING TUBES SEEN IN THE FOREGROUND.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE ADDRESS

Alaska Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504

Arizona Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025

Colorado (N. Mex.) P. O. Box 17107, Denver, Colorado 80217

Idaho Room 345, 304 N. 8th. St., Boise, Idaho 83702

Montana P. O. Box 98, Bozeman, Montana 59715

Nevada P. O. Box 4850, Reno, Nevada 89505

Oregon 1220 S. W. Third Ave., Portland, Oregon 97204

Utah 4420 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138

Washington 360 U. S. Court House, Spokane, Washington 99201

Wyoming P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W, Calgary, Alberta T3C 1A6.



WATER SUPPLY OUTLOOK FOR OREGON

and FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued

FEBRUARY 1, 1980

Issued by

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In Cooperation with

OREGON
DEPARTMENT
OF
WATER RESOURCES

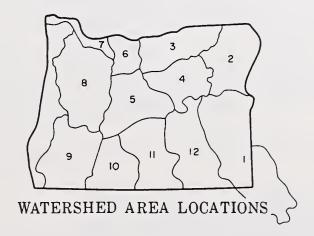
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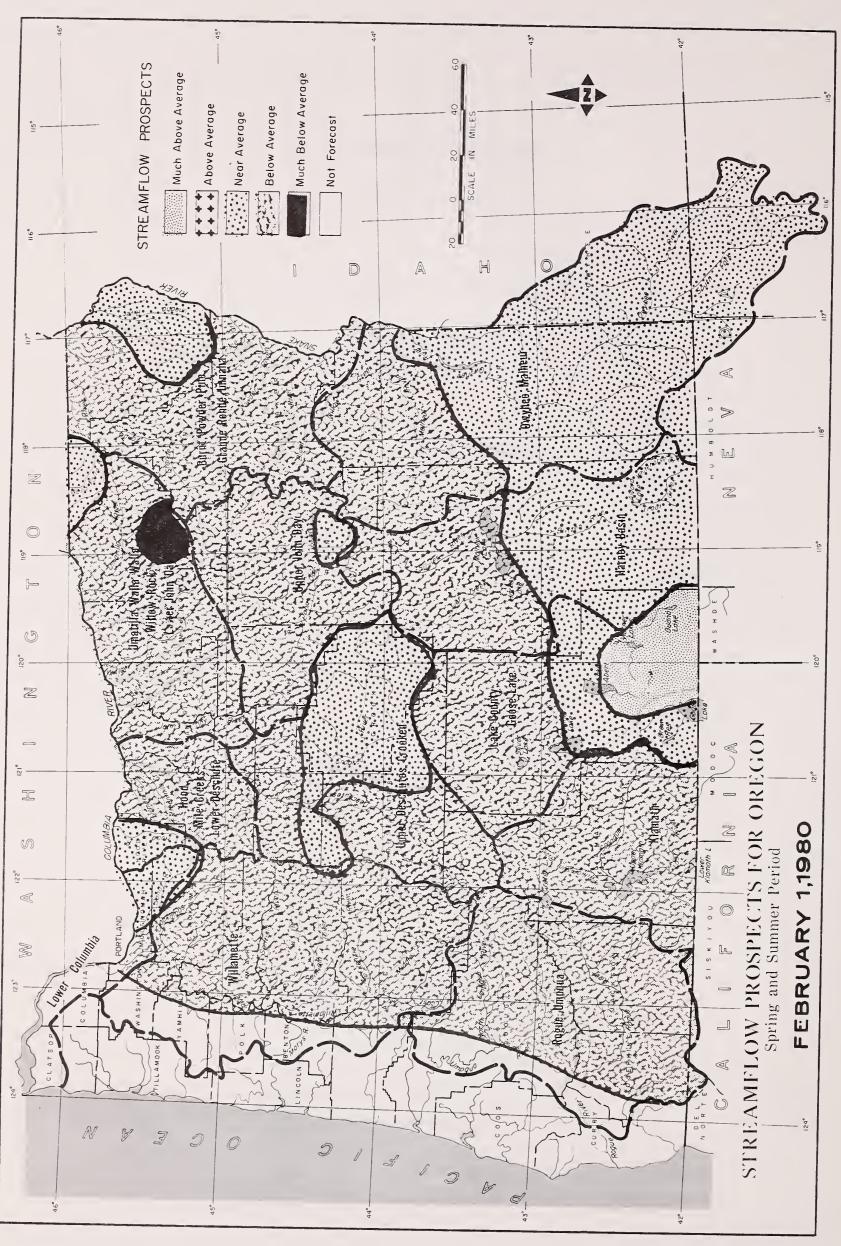
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TABLE OF CONTENTS

| | | PAGE |
|------|-----|--|
| | ST | REAMFLOW PROSPECTS FOR OREGON |
| | WA | TER SUPPLY OUTLOOK FOR OREGON |
| | | DETAILED WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS |
| AREA | 1 | Owyhee, Malheur 3 |
| AREA | 2 | BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA |
| AREA | 3 | UMATILLA. WALLA WALLA. WILLOW, ROCK, LOWER JOHN DAY |
| AREA | 4 | UPPER JOHN DAY9 |
| AREA | 5 | UPPER DESCHUTES. CROOKED11 |
| AREA | 6 | HOOD. MILE CREEKS, LOWER DESCHUTES |
| AREA | 7 | LOWER COLUMBIA |
| AREA | 8 | WILLAMETTE |
| AREA | 9 | ROGUE. UMPQUA19 |
| AREA | 10 | KLAMATH21 |
| AREA | 1.1 | LAKE COUNTY. GOOSE LAKE23 |
| AREA | 12 | HARNEY BASIN |
| | ВА | SIC DATA SUPPLEMENTS SNOW PRECIPITATION |
| | MA | P AND INDEX OF OREGON SNOW COURSES(MAP) |
| | LI | ST OF COOPERATORS |





WATER SUPPLY OUTLOOK AND SUMMARY FOR OREGON

FEBRUARY 1, 1980

SNOW COVER

The snowpack in the Cascades south of Mt. Hood is extremely poor again. This is the fifth year in a row for these conditions. The snow cover in central and eastern Oregon is mostly below average. Good snow cover exists on Mt. Hood, in Crook, Lake and Malheur counties.

PRECIPITATION

Precipitation during January was close to average or above over all of Oregon except in the Rogue and Umpqua basins and the Wallowas where it was below average. The precipitation came during periods of warm weather with a high freezing level and therefore fell as rain in the mountains. This rainfall ran off into our streams and therefore did not contribute much to increasing our mountain snowpack.

RESERVOIR STORAGE

Generally, stored water supplies in the state are a little below normal for this time of year. The situation is improved from a month ago due to the runoff received from the good rains received during January. Twenty-six of the major irrigation reservoirs are storing 1,840,000 acre feet compared to the normal of 1,991,000 for February 1.

STREAMFLOW

Runoff during the past month was good due to the rains received during January.

-continued on next page-

STREAMFLOW (CONT.)

Forecasts of representative Oregon streams are as follows:

| STREAM | PERIOD | FORECAST % of 1963-77 AVG. |
|----------------------------------|-------------|----------------------------|
| Owyhee net Inflow | April-Sept. | 94 |
| Malheur nr. Drewsey | April-Sept. | 90 |
| Deschutes @ Benham Falls | April-Sept. | 80 |
| Grande Ronde @ LaGrande | April-Sept. | 78 |
| Willamette Mid. Fk. nr. Oakridge | April-Sept. | 75 |
| Upper Klamath Lake net Inflow | April-Sept. | 78 |
| Rogue @ Raygold | April-Sept. | 80 |
| Silvies nr. Burns | April-Sept. | 82 |

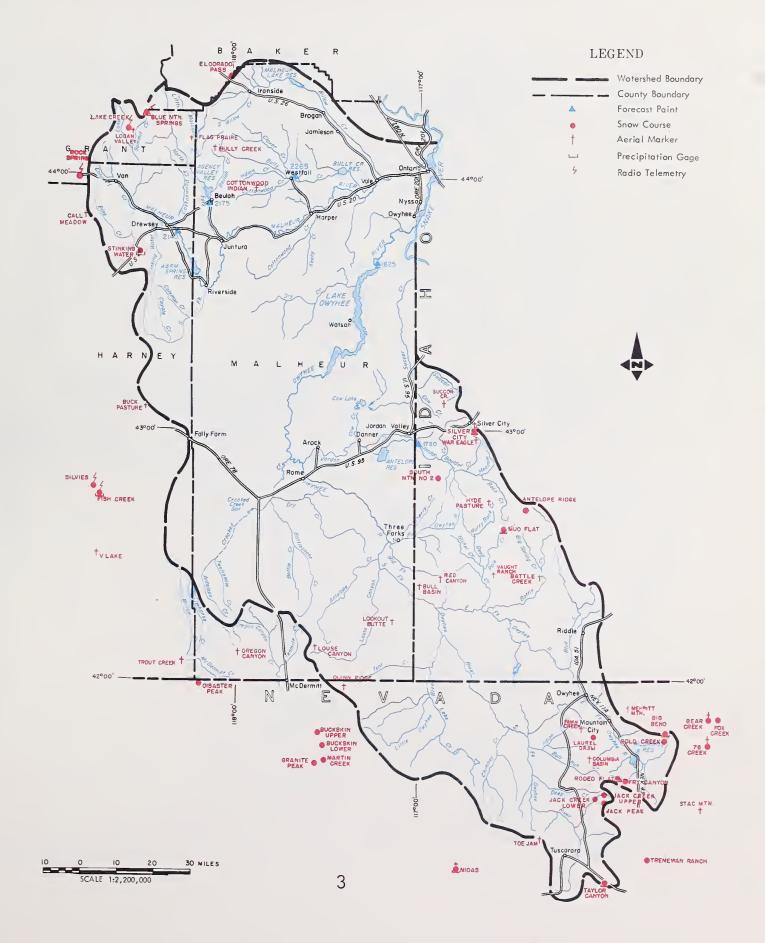
It should be noted that these forecasts are based on receiving normal weather conditions (100% of average snow and precipitation) from now until the end of the forecast period.

The forecasts in this bulletin are a result of coordinated activity between the Soil Conservation Service and the National Weather Service as an effort to provide the best possible service to water users.

This report contains data furnished by the Oregon Department of Water Resources, U.S. Geological Survey, NOAA National Weather Service and other cooperators.

GENERAL OUTLOOK

Water supplies should be normal for Malheur County this summer. The snowpack is good on the Owyhee drainage and only slightly below average in the Malheur basin. Reservoir storage is good and streamflow for the summer is forecast to be average on the Owyhee and 80 to 90% on the Malheur. Precipitation during January was 150% of average.



| TREAMFLOW FORECASTS | | THIS YEAR | | | PAST RECORD | |
|--|--|--|---|--------------------|--|--|
| | FORE | CAST | FORECAST | THOUSAND ACRE FEET | | |
| BASIN, STREAM and/or FORECAST POINT | Thousand Acre Feet | Percent of Average | PERIOD | Last Year | Average ^C | |
| Bully Creek at Warmsprings Malheur near Drewsey Malheur, North Fork at Beulah Owyhee Reservoir net Inflow Owyhee at Rome | 9.8 98 60 72 58 554 367 560 | 78 92 82 88 86 96 94 94 | March-May FebJuly April-Sept. FebJuly April-Sept. FebJuly April-Sept. FebJuly | 637 378 | 12.6b 107 73 82 67 578 392 596b | |

FORECAST DATE of LOW FLOW VALUES

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

| | MESERADIK SIOKAGE (1 | nousanu | nu. 1 (.) | END OF | MONTH | | | |
|------------------|--|-------------------|-------------------|--|--------------------------------|-------------------------------|------------------------------|-------------------------------|
| FORECAST POINT | Low Flow Value Second/Ft. Forecast Date Stream Will Recede to Low Value Value | | RESERVOIR | Usable Capacity | Usable Storage This Last | | | |
| | Jeculu/ I t. | Flow Value | Value | | | This Year | Year | Average C |
| Owyhee near Rome | 1000 250 | May 29 June 25 | May 24 June 20 | Beulah Reservoir Bully Creek Owyhee Warmsprings | 60.0 30.0 715.0 191.0 | 20.3 19.7 540.6 95.4 | 14.5 9.0 511.0 72.1 | 27.9 14.9 485.1 95.2 |

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

| RIVER BASIN and/or SUB-WATERSHED | Number of Courses Averaged | WATER AS | AR'S SNOW PERCENT OF |
|---|----------------------------------|----------------|-------------------------|
| SOUTHATERSHED | Attended | Last Year | Average C |
| Jordan Creek Malheur River Owyhee River | - 4 6 | - 102 85 | - 86 102 |
| | - | | |
| | | | |
| | | | |

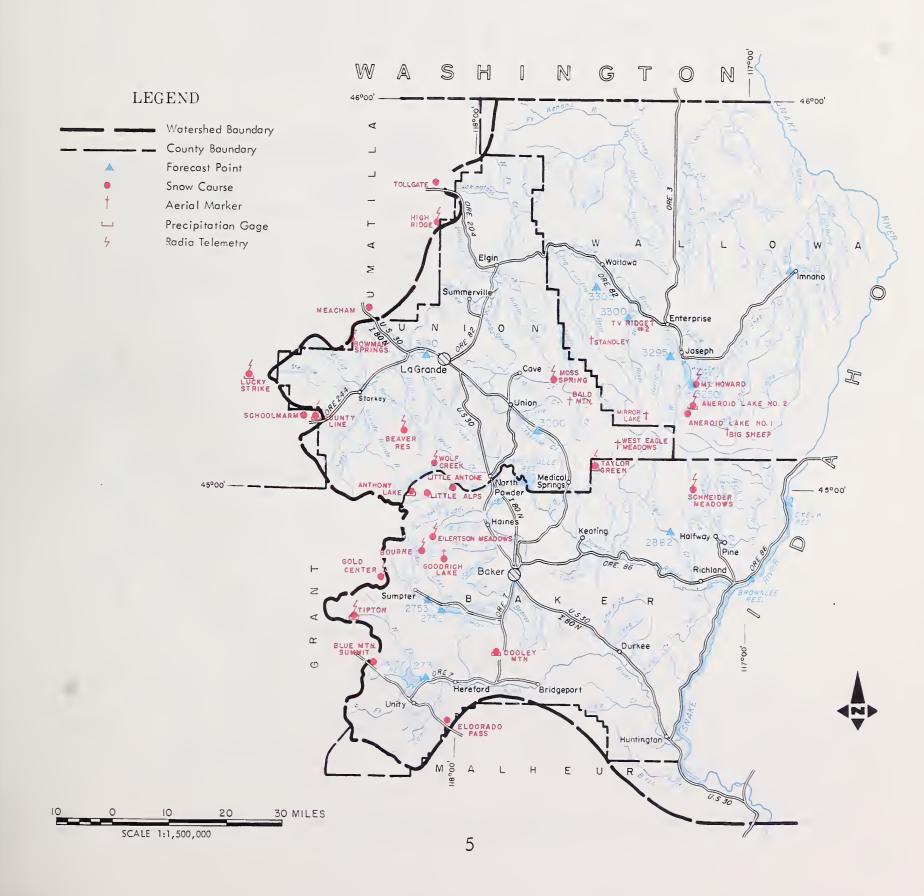
⁽a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK

BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS OREGON

GENERAL OUTLOOK

Water supplies should be below normal except for users with stored water available and along the north side of the Wallowa Mountains. The snowpack is below normal for this time of year. Precipitation during January was 82% of normal. Reservoir storage is slightly below average.



| TREAMFLOW FORECASTS | THIS YEAR | | | PAST RECORD | |
|---|---|--|--|--------------------|--|
| | FORE | CAST | FORECAST | THOUSAND ACRE FEET | |
| BASIN, STREAM and/or FORECAST POINT | Thousand Acre Feet | Percent of Average | PERIOD | Last Year | Average |
| Anthony Creek blw. North Fork nr.North Powder Bear near Wallowa Big Creek blw. Burn Creek nr. Medical Spring Burnt near Hereford Catherine near Union Deer Creek abv. Phillips Res. nr. Sumpter Eagle Creek abv. Skull Creek Grande Ronde at LaGrande Hurricane near Joseph Imnaha at Imnaha Lostine near Lostine Pine Creek nr. Oxbow | 14.7 55 8.7 41 30 47 13.9 127 140 147 126 41 284 111 | 85 85 71 82 82 73 76 75 76 74 78 90 93 90 70 | FebJuly April-Sept. FebJuly FebJuly April-Sept. April-Sept. FebJuly April-July April-Sept. March-Sept. April-Sept. April-Sept. April-Sept. April-Sept. April-Sept. FebJuly | 312 239 | 17.3 65 12.3 50 36 64 18.3b 169 184 199 161 46 305 123 238 b |
| Powder near Sumpter Wallowa, East Fork near Joseph Wallowa at Joseph Wolf Creek Res. net Inflow | 47 48 12.0 10.8 62 11.4 | 82 82 94 94 90 86 | April-July April-Sept. FebSept. April-Sept. May-July March-June | | 57 58 12.8 11.5 69 13.2b |

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

| TOUND STOUNDE (| iivusaiiu | 70. IL. | END OF | MONTH |
|--|--------------------------------------|-------------------------------------|--------------------------------------|------------------------------------|
| RESERVOIR | Usable | U | ge | |
| RESERVOIR | Capacity | This Year | Last Year | Average ^C |
| Phillips Lake Thief Valley Unity Wallowa Lake Wolf Creek | 73.5 17.4 25.2 37.5 10.4 | N/R 14.0a 10.5 15.4 3.3 | 43.6 17.0α 11.2 29.7 5.9 | 43.7b 15.5b 12.5 21.4 |
| | | | | |
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SUMMARY of SNOW MEASUREMENTS

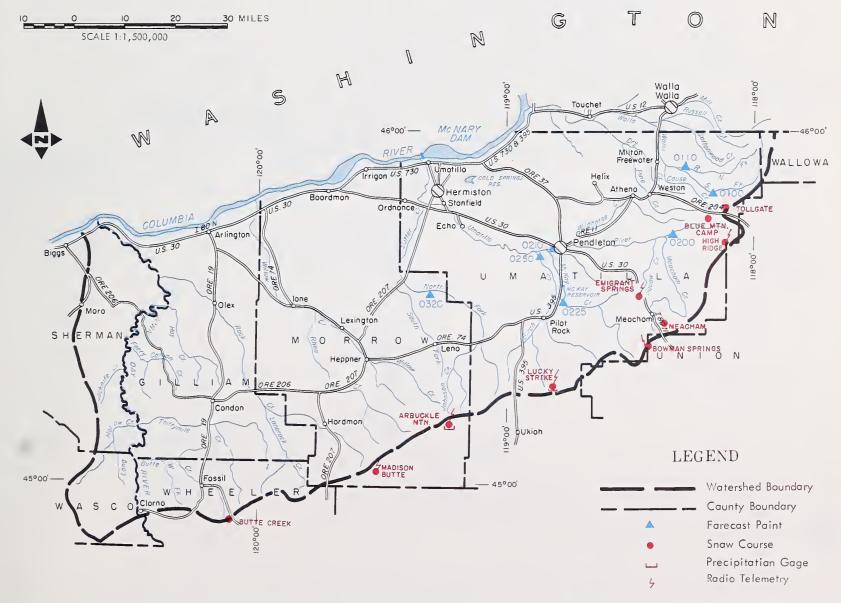
| This Year Average SUB-WATERSHED Courses Averaged Last Ye | 64 61 |
|--|-----------|
| This Year Average SUB-WATERSHED Averaged Last Ye | Average C |
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | 61 |
| 10.4 3.3 5.9 Wallowa, Imnaha, 6 122 Catherine Creek | 82 82 |

⁽a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow (e) Not scheduled.

UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS OREGON

GENERAL OUTLOOK

Water supplies should be adequate for users with stored supplies available. The snowpack is poor on Birch Creek and McKay Creek, and below average on the Umatilla, Walla Walla, Butter Creek and Willow Creek watersheds. Reservoir storage is slightly below average. Precipitation for January was 111% of normal.



| TREAMFLOW FORECASTS | | THIS YEAR | | | PAST RECORD | |
|---|--|--|--|--------------------|---|--|
| | FORECAST | | FORECAST | THOUSAND ACRE FEET | | |
| BASIN, STREAM and/or FORECAST POINT | Thousand Acre Feet | Percent of Average | PERIOD | Last Year | Average | |
| Butter Creek nr. Pine City Couse Creek nr. Milton Freewater McKay near Pilot Rock Pine Creek near Weston Rhea Creek nr. Heppner Rock Creek abv. Cayuse Canyon nr. Condon Umatilla near Gibbon Umatilla at Pendleton Walla Walla, South Fork near Milton Willow Creek at Heppner | 9.1 6.1 13.2 5.2 7.3 18.9 75 58 151 79 66 7.6 | 85 85 60 90 90 90 76 74 74 96 95 | March-July FebJuly April-Sept. FebJuly FebJuly March-Sept. April-Sept. March-Sept. April-Sept. April-Sept. April-Sept. | | 10.7 7.2b 22 5.7b 8.1 21 b 99 78 204 82 69 8.4 | |

FOREGRET DATE of LOW FLOW VALUES DECEDRATE OF CLASS (Thomas I A. E.)

| FORECAST DATE of LOW | FLOW VAL | UES | | RESERVOIR STORAGE (TI | nousand | Ac. Ft.) | END OF M | IONTH |
|-----------------------|--|-----------------------------|----------------------|-----------------------|----------------|--------------|--------------|--------------|
| EODECAST DOINT | Low Flow Value Stream Will Of Low Flow | | RESERVOIR | Usable | Usable Storage | | | |
| FORECAST POINT | Second/Ft. | Recede to Low Flow Value | of Low Flow Value | RESERVOIR | Capacity | This Year | Last Year | Average C |
| Umatilla at Pendleton | 550 | May 3 | May 22 | Cold Springs McKay | 50.0 73.8 | 24.5 30.7 | 16.8 29.5 | 28.5 34.4 |
| | 1 | | 1 | CUMBBARDY of CHOW ME | ACHDEM | ENTC | ı | 1 |

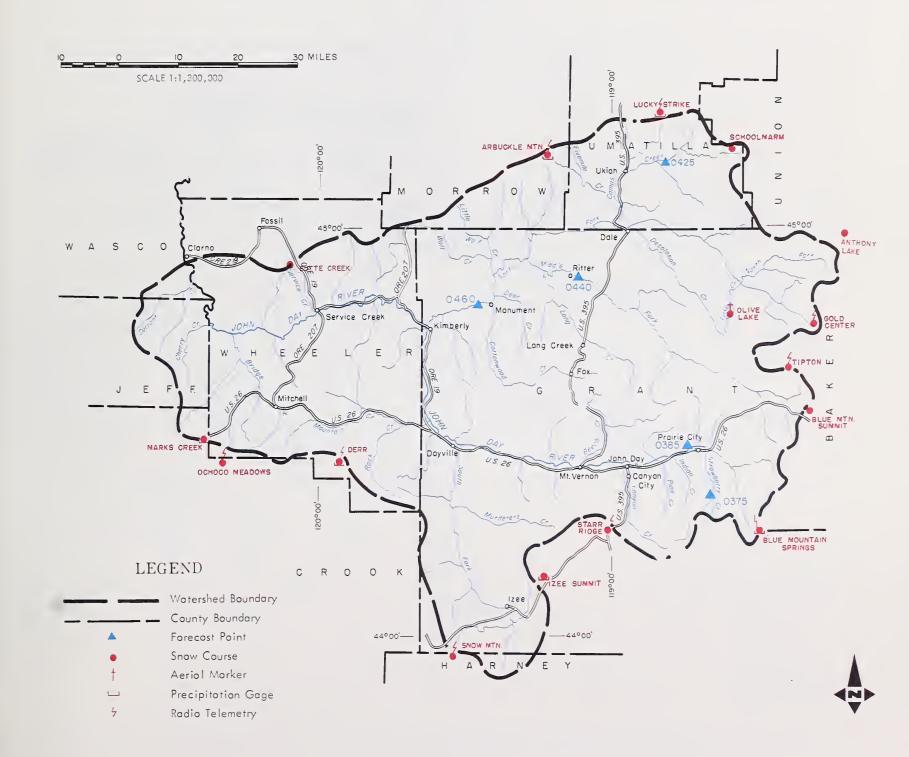
SUMMARY of SNOW MEASUREMENTS

| (COMPARISON WITH PREVIOUS YEARS) | | | | | | | | | |
|--|----------------------|---|----------------|--|--|--|--|--|--|
| RIVER BASIN and/or | Number of Courses | THIS YEAR'S SNOW WATER AS PERCENT OF | | | | | | | |
| SUB-WATERSHED | Averaged | Last Year | Average C | | | | | | |
| McKay Creek Umatilla River Walla Walla River | 3 3 2 | 46 68 70 | 52 73 71 | | | | | | |
| | | | | | | | | | |

WATER SUPPLY OUTLOOK UPPER JOHN DAY WATERSHEDS OREGON

GENERAL OUTLOOK

Water supplies in the John Day basin should be slightly below average based on current snow surveys. The snowpack is 80% of average. January precipitation was below average.



| STREAMFLOW FORECASTS | | THIS YEAR | PAST RECORD | | | |
|--|--|---|---|--------------------|--|--|
| | FORE | CAST | FORECAST | THOUSAND ACRE FEET | | |
| BASIN, STREAM and/or FORECAST POINT | Thousand Acre Feet | Percent of Average | PERIOD | Last Year | Average ^C | |
| Camas Creek near Ukiah John Day, Middle Fork at Ritter John Day, North Fork at Monument Mountain Creek nr. Mitchell Strawberry near Prairie City | 34 28 112 90 550 465 5.5 6.6 6.9 | 82 84 84 86 86 110 90 | March-July April-Sept. March-July April-Sept. March-July April-Sept. FebJuly March-July April-Sept. | | 42 34 133 108 639 541 4.6b 7.3 7.7 | |

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

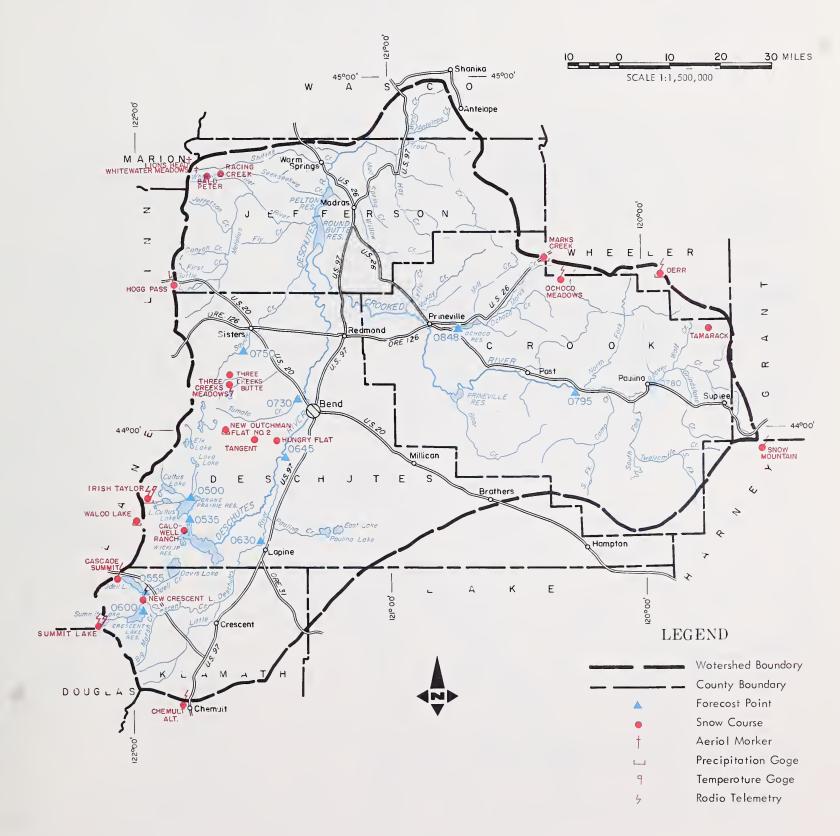
| (COMPARISON WITH PREVIOUS YEARS) | | | | | | | | |
|----------------------------------|----------------------|-----------|-------------------------|--|--|--|--|--|
| RIVER BASIN | Number of Courses | THIS YE | AR'S SNOW PERCENT OF | | | | | |
| and/or SUB-WATERSHED | Averaged | Last Year | Average C | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| John Day, North Fork | 6 5 | 102 | 82 | | | | | |
| John Day abv. Dayville | 5 | 95 | 81 | | | | | |
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⁽a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

UPPER DESCHUTES, CROOKED WATERSHEDS OREGON

GENERAL OUTLOOK

The Deschutes basin snowpack is generally below normal. It is very poor on the Little Deschutes and Crescent Creek drainages. The Crooked River has an average snowpack. Resultant water supplies will be below normal for users who divert directly from streams for all areas except the Crooked River. Stored water supplies are below average but should be adequate next summer. Precipitation this past month was 130%.



| TREAMFLOW FORECASTS | | THIS YEAR | PAST RECORD | | |
|--|-----------------------|-----------------------|--|-----------|-----------------------------|
| | FORE | CAST | FORECAST | THOUSAND | CRE FEET |
| BASIN, STREAM and/or FORECAST POINT | Thousand Acre Feet | Percent of Average | PERIOD | Last Year | Average |
| Beaver Creek near Paulina | 39 16.1 | 100 | FebJuly | | 39 16.1 |
| Crane Prairie Reservoir total Inflow Crescent at Crescent Lake | 102 13.6 15.4 | 100 85 68 70 | April-Sept. April-Sept. March-July April-Sept. | | 120 20 22 |
| Crooked River nr. Prineville | 161 90 | 100 | FebJuly April-Sept. | | 161 90 |
| rooked R.,No.Fk. blw. Lookout Cr.Nr. Paulina eschutes at Benham Falls | 13.0 386 582 | 90 80 80 | FebJuly April-July April-Sept. | | 14.5 <i>b</i> 483 728 |
| eschutes below Snow Creek | 64 50 | 85 80 | FebSept. April-Sept. | | 75 63 |
| Deschutes, Little near La Pine | 73 53 30 | 72 72 | FebJuly April-July | | 102 74 29 |
| Ochoco Reservoir net Inflow | 16.3 42 | 102 102 85 | FebJuly April-Sept. April-Sept. | | 16 49 |
| Squaw near Sisters Tumalo near Bend | 43 | 95 | April-Sept. | | 45 |
| | | | | | |
| | | | | | |
| | | | | | |

FORECAST DATE of LOW FLOW VALUES

* Not forecast until

March.

| FORECAST POINT | Low Flow Value Second/Ft. | Forecast Date Stream Will Recede to Low Flow Value | Average Date of Low Flow Value |
|-----------------------------|---------------------------------|---|--------------------------------------|
| Crane Prairie net Inflow | 300 | May 28 | July 15 |
| Crooked R. near Post | 100 | May 29 | June 1 |
| Deschutes at Bend | 1500 | * | July 1 |
| Little Deschutes near | 400 200 | May 13 June 4 | June 7 July 8 |

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

| RESERVOIR | RESERVOIR Usable | | sable Stora | ge |
|---|--|---------------------------------------|---------------------------------------|--|
| RESERVOIR | Capacity | This Year | Last Year | Average ^C |
| Crane Prairie Crescent Lake Ochoco Prineville Wickiup | 55.3 86.9 47.5 153.0 200.0 | 27.7 27.5 30.6 94.8 133.8 | 34.2 40.8 29.0 92.3 156.3 | 44.9 61.4 26.0 101.1 156.4 |

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

| (COMPARISON WITH PREVIOUS YEARS) | | | | | | | |
|---|-----------|---------------------|-----------|--|--|--|--|
| RIVER BASIN | Number of | THIS YEAR'S SNOW | | | | | |
| and/or | Courses | WATER AS PERCENT OF | | | | | |
| SUB-WATERSHED | Averaged | Last Year | Average C | | | | |
| Crooked, Ochoco Deschutes abv. Wickiup Little Deschutes Tumalo & Squaw Crs. Shitike | 3 | 91 | 77 | | | | |
| | 4 | 175 | 81 | | | | |
| | 4 | 163 | 54 | | | | |
| | 3 | 179 | 83 | | | | |
| | 4 | 135 | 98 | | | | |

⁽a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

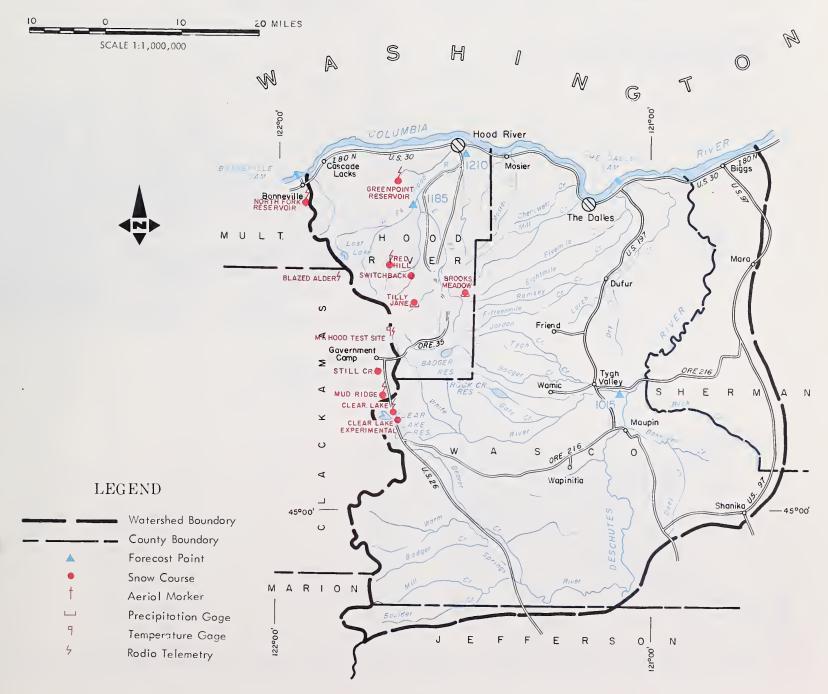
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HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS

OREGON

GENERAL OUTLOOK

Hood River and Wasco counties received much snow during January. The snowpack is improved from last month. Water supplies this summer should be near normal. Precipitation this past month was 118% of average.



| TREAMFLOW FORECASTS | | THIS YEAR | PAST RECORD | | |
|---|---------------------------------------|----------------------------------|---|-----------|--|
| | FORE | CAST | FORECAST | THOUSAND | ACRE FEET |
| BASIN, STREAM and/or FORECAST POINT | Thousand Acre Feet | Percent of Average | PERIOD | Last Year | Average C |
| Hood River near Hood River Hood, West Fork near Dee White below Tygh Valley | 222 264 114 134 97 110 | 90 90 90 90 85 85 | April-July April-Sept. April-July April-Sept. April-July April-July April-Sept. | | 247 293 127 149 114 129 |
| | | | | | |

FORECAST DATE of LOW FLOW VALUES

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

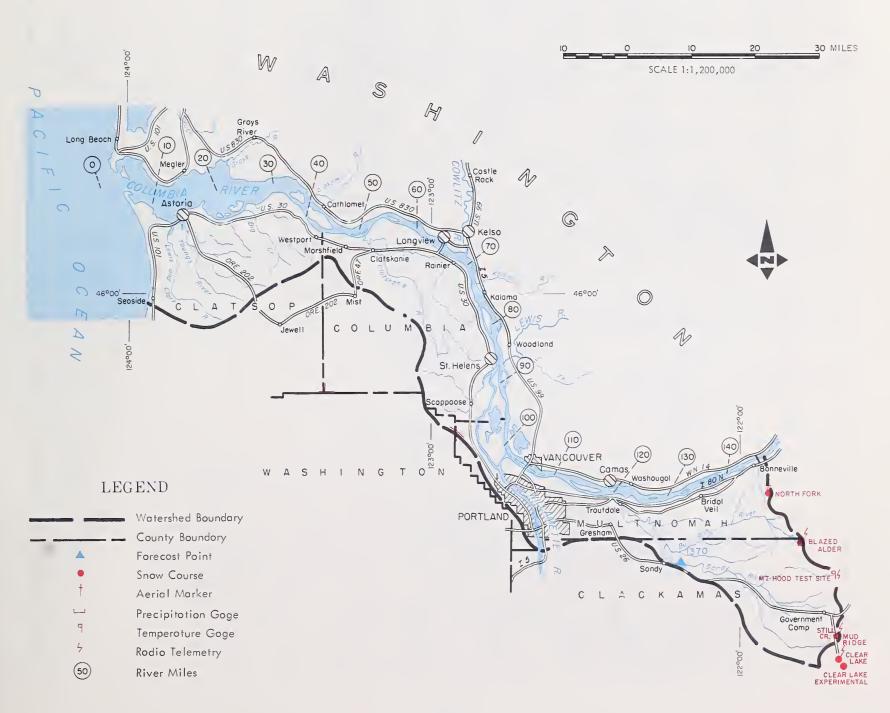
| FURECAST DATE OF LUW | FLUW VAI | LUE2 | | RESERVOIR STORAGE (II | nousand A | C. FT.) | END OF I | HTNON |
|--|-------------------|-----------------------------|--------------------------|--|-----------------------------|--------------|--------------|-----------|
| FORECAST POINT | Low Flow Value | | Average Date of Low Flow | RESERVOIR | Usable | | able Stora | |
| | Second/Ft. | Recede to Low Flow Value | Value | | Capacity | This Year | Last Year | Average C |
| Clear Branch Inflow | * 35 | July 15-31 | **39 | Clear Lake (Wasco) | 11.9 | 1.1 | 0.1 | 3.9 |
| * Average cfs forecast to flow for this two-week period. | | | | | | | | |
| **Average cfs for period of record. | | | | | | | | |
| | | | | | | | | |
| | | | · | | | | | |
| | | | | SUMMARY OF SNOW ME (COMPARISON WITH PREVIOUS | | NTS | | |
| | | | | RIVER BASIN and/or | Number Course Average | s WAT | | RCENT OF |
| | | | | SUB-WATERSHED | Average | Last | Year | Average C |
| | | | | Hood River | 5 | 1 | 165 | 90 |
| · | | | | Mile Creeks White River | 3 | 1 | 153 | 91 |
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| | | | | | | | | |
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| | | | | | | | | |

⁽a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK LOWER COLUMBIA WATERSHEDS OREGON

GENERAL OUTLOOK

Water supplies should be adequate in the Lower Columbia. Stages will probably be below average as volume streamflow is forecast to be 81% at The Dalles. The Upper Columbia snowpack is below average.



SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

| RIVER BASIN and/or | Number of Courses | THIS YEAR'S SNOW WATER AS PERCENT OF | | | |
|-----------------------|----------------------|--------------------------------------|-----------|--|--|
| SUB-WATERSHED | Averaged | Last Year | Average C | | |
| | | | | | |
| Sandy River | 2 | 156 | 96 | | |

| STREAMFLOW FORECASTS | | THIS YEAR | PAST RECORD | | |
|--|------------------------------|-----------------------|--|-----------|-------------------------------|
| BASIN, STREAM and/or FORECAST POINT | FORE | CAST | FORECAST | THOUSAND | ACRE FEET |
| | Thousand Acre Feet | Percent of Average | PERIOD | Last Year | Average C |
| Columbia at The Dalles Sandy River near Marmot | 71800 83900 296 346 | 81 81 90 90 | April-July April-Sept. April-July April-Sept. | | 88520 103500 329 384 |

HISTORICAL DATA (Columbia River at The Dalles)

| VEAD | | STREAMFLOW d(1,000 A F |) | REGULATED PEAK | 5476 | |
|------------------|-------------|------------------------|------------|----------------|---------|--|
| YEAR APR - SEPT. | APR — SEPT. | APR — JUNE | MAY - JUNE | (1,000 cfs) | DATE | |
| 1958 | 97,700 | 72,000 | 58,600 | 593 | May 31 | |
| 1959 | 112,500 | 71,900 | 58,900 | 555 | June 23 | |
| 1960 | 97,000 | 64,000 | 48,000 | 442 | June 6 | |
| 1961 | 101,400 | 74,400 | 64,000 | 699 | June 8 | |
| 1962 | 94,600 | 64,100 | 49,200 | 460 | June 5 | |
| 1963 | 87,000 | 56,300 | 46,200 | 437 | June 18 | |
| 1964 | 109,020 | 70,739 | 61,313 | 662 | June 18 | |
| 1965 | 114,137 | 80,024 | 62,477 | 520 | June 9 | |
| 1966 | 87,268 | 58,120 | 45,922 | 396 | June 12 | |
| 1967 | 107,771 | 72,408 | 65,112 | 622 | June 10 | |
| 1968 | 89,000 | 55,500 | 47,900 | 404 | June 13 | |
| 1969 | 112,300 | 85,700 | 63,800 | 515 | May 15 | |
| 1970 | 88,100 | 62,800 | 55,200 | 425 | May 28 | |
| 1971 | 122,900 | 88,400 | 73,700 | 557 | May 13 | |
| 1972 | 134,700 | 96,400 | 81,400 | 619 | June 20 | |
| 958-72 Avg. | 104,300 | 72,900 | 59,900 | 529 | | |

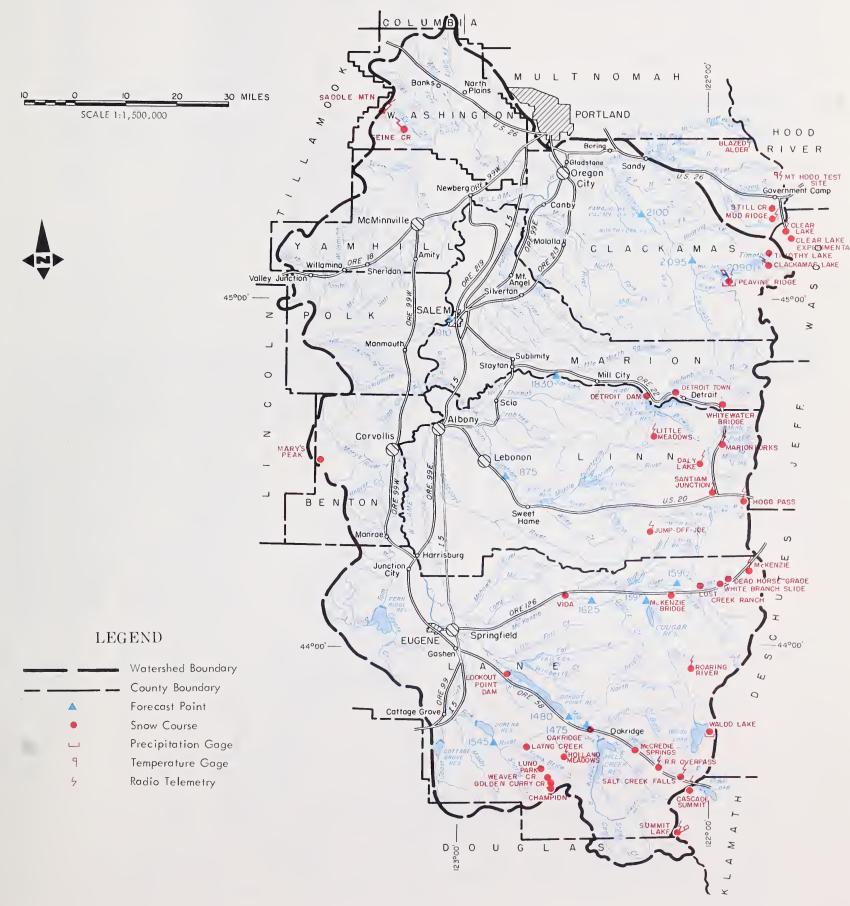
LOWER COLUMBIA RIVER FLOOD STAGES (with 9.5' tide at Astoria)

| | | | | DRAINA | GE DISTRICT PUM | PHOUSE | | |
|----------------|----------------|-------|-------------|-----------|-----------------|---------|--------|---------|
| VANCOUVER | FLOW AT | SANDY | SAUVIE ISL. | SCAPPOOSE | DEER ISL. | RAINIER | BEAVER | WOODSON |
| GAGE | THE DALLES | | | | RIVER MILES | | | • |
| (Weather Bu) | (1,000 c f s) | 118.9 | 96.0 | 91.0 | 77.0 | 62.0 | 52.0 | 47. 0 |
| 35 (1894) | 1210 | 41.2 | 34.2 | 33.3 | 28.5 | 21.9 | 17.5 | 15.5 |
| 34 | 1160 | 40.5 | 33.5 | 32.5 | 27.7 | 21.2 | 17.0 | 15.0 |
| 33 | 1100 | 39.6 | 32.4 | 31.4 | 26.7 | 20.2 | 16.1 | 14.3 |
| 32 (1972) | 1050 | 38.9 | 31.5 | 30.5 | 25.7 | 19.5 | 15.4 | 13.7 |
| 31 (1948) | 1000 | 38.0 | 30.7 | 29.5 | 25.1 | 18.8 | 14.7 | 13.0 |
| 30 | 943 | 36.6 | 29.5 | 28.5 | 24.3 | 18.1 | 14.0 | 12.4 |
| 29 | 897 | 35.5 | 28.5 | 27.7 | 23.7 | 17.5 | 13.4 | 11.8 |
| 28 | 853 | 34.3 | 27.5 | 26.7 | 22.8 | 17.0 | 13.0 | 11.4 |
| 27 (1956) | 811 | 33.0 | 26.5 | 25.6 | 21.8 | 16.2 | 12.5 | 11.0 |
| 26 (1950) | 771 | 32.1 | 25.5 | 24.6 | 20.9 | 15.5 | 12.2 | 10.7 |
| 25 | 733 | 30.7 | 24.2 | 23.2 | 19.7 | 14.6 | 11.7 | 10.3 |
| 24 | 697 | 29.7 | 23.0 | 22.2 | 19.0 | 14.1 | 11.4 | 10.2 |
| 23 | 662 | 29.0 | 22.3 | 21.4 | 18.4 | 13.6 | 11.2 | 10.0 |
| 22 | 628 | 28.1 | 21.4 | 20.3 | 17.2 | 13.0 | 10.9 | 9.7 |
| 21 | 595 | 27.2 | 20.7 | 19.5 | 16.4 | 12.6 | 10.6 | 9.6 |
| 20 (1954) | 564 | 26.2 | 19.8 | 18.6 | 15.5 | 12.1 | 10.2 | 9.4 |
| 19 | 534 | 25.5 | 19.2 | 18.0 | 15.0 | 11.8 | 10.0 | 9.3 |
| 18 | 501 | 24.4 | 18.3 | 17.2 | 14.3 | 11.4 | 9.8 | 9.1 |
| 17 | 479 | 23.4 | 17.4 | 16.4 | 13.7 | 11.0 | 9.6 | 8.9 |
| 16 | 452 | 22.4 | 16.5 | 15.5 | 13.0 | 10.> | 9.3 | 8.7 |

WATER SUPPLY OUTLOOK WILLAMETTE WATERSHEDS OREGON

GENERAL OUTLOOK

The Willamette valley should have below average supplies for users dependent on direct diversion. The snowpack in the Cascades is very poor except on Mt. Hood where it is near average. Precipitation this past month was 98% of average.



| THIS YEAR | | | PAST RECORD | | |
|-----------------------|---|--|--------------------|---------------------|--|
| FORECAST | | FORECAST | THOUSAND ACRE FEET | | |
| Thousand Acre Feet | Percent of Average | PERIOD | Last Year | Average | |
| 547 | 82 | April-July | | 667 | |
| 410 | 81 | April-July | | 782 506 | |
| 348 | 77 | April-July | | 603 452 | |
| 748 | 73 | April-July | | 598 1024 1259 | |
| 153 | 74 | April-July | | 207 | |
| 112 | 85 | April-July | | 132 | |
| 69 | 70 | April-July | | 98 104 | |
| 541 | 72 | April-July | | 752 860 | |
| 410 | 75 | April-July | | 547 590 | |
| 20 467 | 74 | April-July | 771 | 27 607 | |
| 605 141 | 77 75 | April-Sept. April-July | 849 | 786 188 | |
| 157 3335 | 75 75 | April-Sept. | | 209 4445 | |
| 3333 | | | | | |
| | | | | | |
| | Thousand Acre Feet 547 641 410 488 348 460 748 919 153 173 112 143 69 73 541 619 410 442 20 467 605 141 157 | FORECAST Thousand Acre Feet Percent of Average 547 82 641 82 410 81 488 81 348 77 460 77 748 73 919 73 153 74 173 74 112 85 143 85 69 70 73 70 541 72 619 72 410 75 442 75 20 74 467 77 605 77 141 75 157 75 | FORECAST | Thousand Acre Feet | |

SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

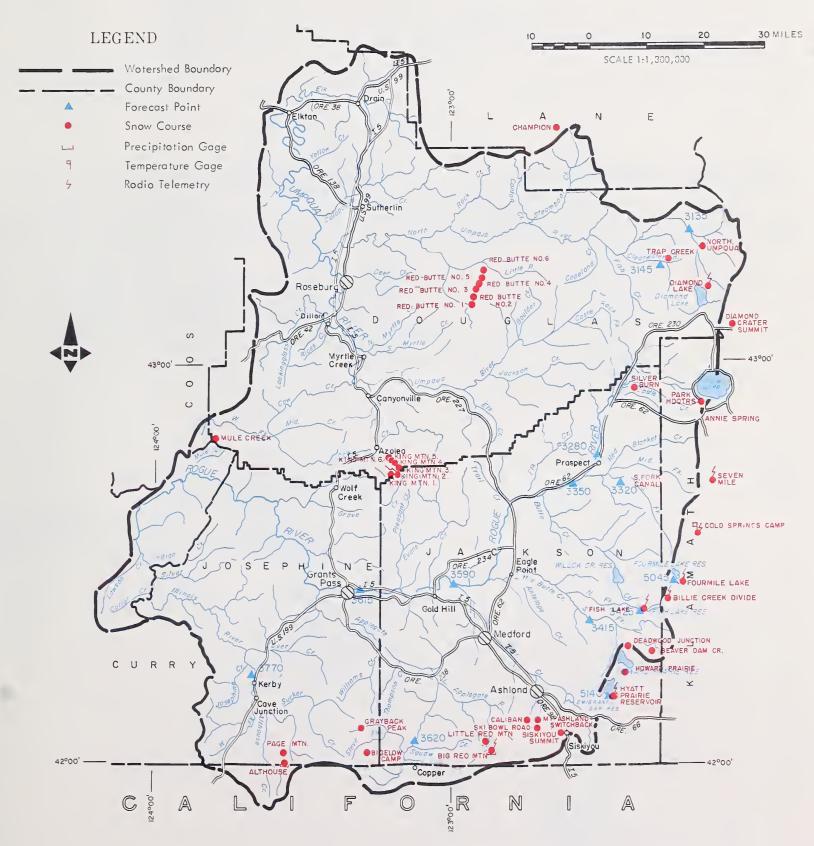
| RIVER BASIN and/or | Number of Courses | | AR'S SNOW PERCENT OF | RESERVOIR | Usable | U | sable Stora | ge |
|---|-----------------------|------------------------------|----------------------------|---|---|---|--|--|
| SUB-WATERSHED | Averaged | Last Year | Average C | RESERVOIR | Capacity | This Year | Last Year | Average C |
| Clackamas River McKenzie River Row River Santiam River Willamette, Mid. Fk. | 2 3 2 4 5 | 122 94 72 84 137 | 57 39 21 36 46 | Blue River Cottage Grove Cougar Detroit Dorena Fall Creek Fern Ridge Foster Green Peter Hills Creek Lookout Point Timothy Lake Henry Hagg Lake *Multiple purpose reservoirspace reserved primarily for flood runoff. | 85.6* 30.0* 155.2* 299.9* 70.5* 115.0* 94.2* 30.0* 270.0* 200.0* 337.2* 61.7 53.0 | 3.2 1.0 21.8 16.3 3.2 10.8 7.5 2.3 12.0 47.0 10.8 34.5 37.1 | 2.2 0.8 0.5 13.6 1.7 2.7 9.9 0.6 5.1 11.1 24.6 17.2 30.9 | 15.1b 3.1 26.1 59.2 13.6 15.0b 22.9 1.2b 51.4b 34.7 59.7 53.7 |

⁽a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK ROGUE, UMPQUA, WATERSHEDS OREGON

GENERAL OUTLOOK

The Rogue and Umpqua Basins are facing the potential of below average water supplies this summer for users dependent on direct diversions. Stored water supplies should be adequate. The snowpack is much below average. Precipitation this past month was 82% of average.



| STREAMFLOW FORECASTS | | THIS YEAR | | | PAST RECORD | | |
|---|--|--|--|------------|--|--|--|
| | FORE | CAST | FORECAST | THOUSAND | ACRE FEET | | |
| BASIN, STREAM and/or FORECAST POINT | Thousand Acre Feer | Percent of Average | PERIOD | Last Year | Average ^C | | |
| Applegate near Copper Clearwater above Trap Creek Fourmile Lake net Inflow Hyatt Reservoir net Inflow Illinois River near Kerby Little Butte, N. Fk. at Fish Lake nr. Lake Cr. Little Butte, S. Fk. near Lake Creek Red Blanket Creek nr. Prospect Rogue above Prospect Rogue, South Fork near Prospect Rogue at Raygold near Central Point Rogue at Grants Pass Sucker Cr. blw. Little Grayback nr. Holland Umpqua, No. blw. Lemolo Res. nr. Toketee Falls Umpqua, So. near Tiller | 106 62 3.0 3.5 132 137 11.2 28 29 200 50 59 590 735 584 717 48 142 123 | 82 87 77 71 75 75 80 82 83 78 80 78 80 77 79 82 84 67 | April-Sept. April-Sept. April-Sept. April-July April-Sept. April-Sept. April-July April-July April-July April-July April-July April-July April-Sept. April-July April-Sept. April-July April-Sept. April-July April-Sept. April-July | 706 843 | 129 71 3.9 4.9 176 183 14.0 34 35 257 62 74 756 919 759 908 58 170 183 | | |

FORECAST DATE of LOW FLOW VALUES

| RESERVOIR STOP | AGE (Thousand | Ac. Ft. | END OF MONTH |
|----------------|---------------|---------|--------------|
|----------------|---------------|---------|--------------|

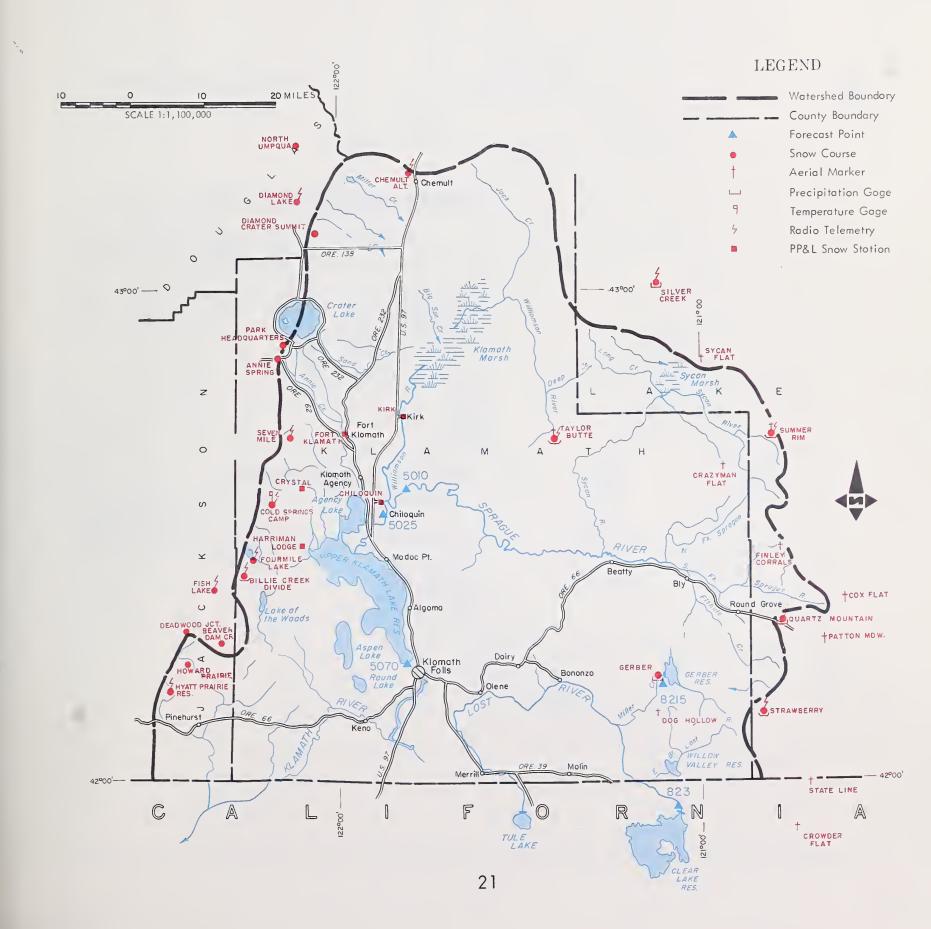
| FORECAST POINT | Low Flow Value | Forecast Date Stream Will | Average Date of Low Flow | RESERVOIR | Usable | U | sable Stora | age |
|-----------------------------------|-------------------|------------------------------|--------------------------|---|--|---|---|-------------------------------------|
| FORECAST POINT | Second/Ft. | Recede to Low Flow Value | Value | RESER VOIR | Capacity | This Year | Last Year | Average C |
| Little Butte Creek, South Fork | 100 | May 14 | May 27 | Emigrant Lake Fish Lake Fourmile Lake Howard Prairie Hyatt Prairie Lost Creek | 39.0 8.0 16.1 60.0 16.1 315.0 | 26.2 5.1 7.0 54.0 12.8 168.5 | 25.4 5.4 6.9 34.6 10.6 172.4 | 24.4 5.9 9.9b 44.5 11.8 |
| | | | | SUMMARY OF SNOW ME (COMPARISON WITH PREVIOUS RIVER BASIN and/or SUB-WATERSHED | | er of WA | THIS YEAR TER AS PE st Year | R'S SNOW RCENT OF Average C |
| | | | | Applegate Bear Creek Butte Creek Illinois River North Umpqua Rogue River | 2 2 4 3 3 4 | 3 1: 3: | 87 56 29 41 34 03 | 64 67 42 33 31 54 |

WATER SUPPLY OUTLOOK KLAMATH WATERSHEDS

OREGON

GENERAL OUTLOOK

The Klamath basin should have near average supplies of water on the Sprague River and below average on the Williamson. Stored water supplies in the county should be adequate although Clear Lake and Gerber are below normal. Precipitation this past month was 100% of average.



| STREAMFLOW FORECASTS | THIS YEAR | | | PAST | RECORD |
|---|--|--|---|--------------------------|--|
| | FORE | CAST | FORECAST | THOUSAND A | CRE FEET |
| BASIN, STREAM and/or FORECAST POINT | Thousand Acre Feet | Percent of Average | PERIOD | Last Year | Average ^C |
| Clear Lake Reservoir Inflow Gerber Reservoir Inflow Sprague near Chiloquin Upper Klamath Lake net Inflow Williamson below Sprague River | 89 35 303 213 684 410 416 286 | 97 85 88 88 78 70 70 | FebJuly FebSept. April-Sept. April-Sept. April-Sept. April-Sept. FebSept. April-Sept. | 589 331 375 255 | 92 41 344 242 877 526 594 409 |

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

| DESERVOIR | Usable | Usable Storage | | | | |
|--|------------------------|------------------------|------------------------|-----------|--|--|
| RESERVOIR | Capacity | This Year | Last Year | Average C | | |
| Clear Lake Gerber Upper Klamath Lake | 440.2 94.0 584.0 | 150.2 34.6 390.8 | 148.3 33.4 349.2 | 50.6 | | |

SUMMARY OF SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

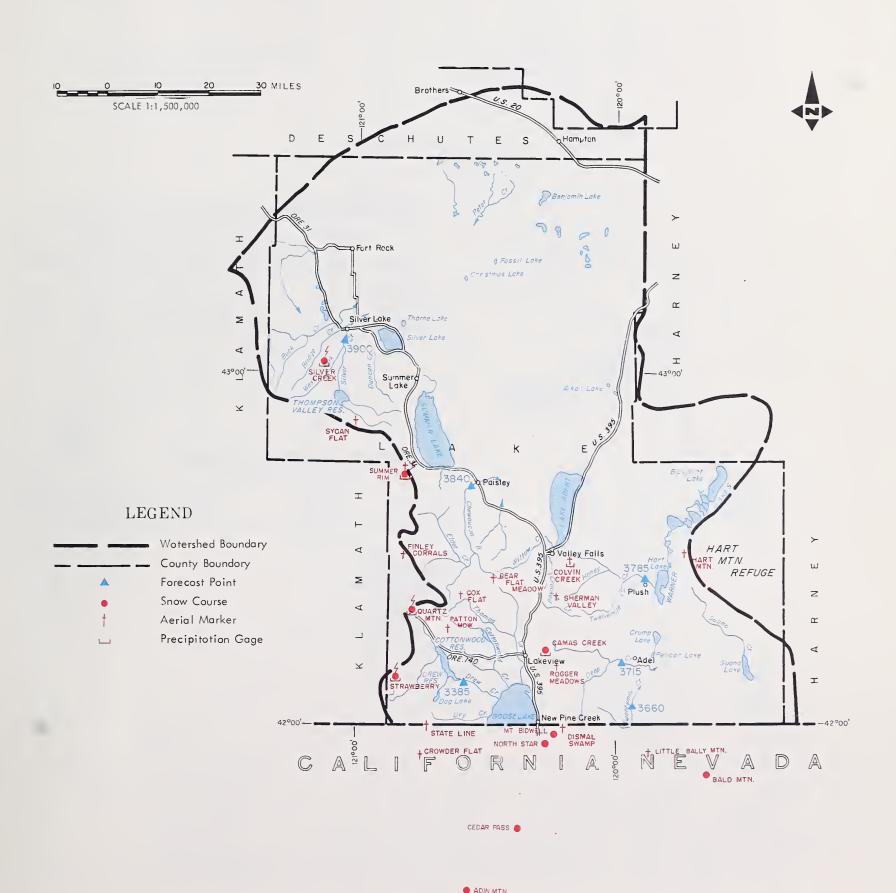
| RIVER BASIN | Number of | THIS YEAR'S SNOW | | | |
|------------------|-----------|---------------------|-----------|--|--|
| and/or | Courses | WATER AS PERCENT OF | | | |
| SUB-WATERSHED | Averaged | Last Year | Average C | | |
| Lost River | 4 | 131 | 84 | | |
| Sprague River | 3 | 149 | 96 | | |
| Upper Klamath | 6 | 164 | 62 | | |
| Williamson River | 3 | 212 | 45 | | |

WATER SUPPLY OUTLOOK

LAKE COUNTY, GOOSE LAKE WATERSHEDS OREGON

GENERAL OUTLOOK

Lake County should have excellent water supplies this summer. The snowpack is generally above average. Precipitation this past month was 137% of average. Reservoir storage is currently below normal.



| STREAMFLOW FORECASTS | | THIS YEA | PAST RECORD | | |
|---|---|--|--|--------------------|--|
| | FORE | CAST | FORECAST | THOUSAND ACRE FEET | |
| BASIN, STREAM and/or FORECAST POINT | Thousand Acre Feet | Percent of Average | PERIOD | Last Year | Average C |
| Chewaucan near Paisley Cottonwood Creek nr. Lakeview Deep above Adel Drews Reservoir net Inflow Honey Creek near Plush Silver Creek near Silver Lake Twentymile near Adel | 88 13.2 108 41 27 11.0 35 | 100 114 135 100 129 74 135 | March-July March-July March-July March-July March-July April-July March-July | 46 | 88 11.6 80 41 21 14.1 26 |

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

| RESERVOIR | Usable | Usable Storage | | | | |
|--|---------------------|--------------------|--------------------|---------------------------------------|--|--|
| RESERVOIR | Capacity | This Year | Last Year | Average ^C | | |
| Cottonwood Drews Thompson Valley | 8.7 63.0 19.5 | N/R 33.4 4.4 | 3.0 31.4 7.9 | 2.8 <i>b</i> 39.3 14.0 <i>b</i> | | |

SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

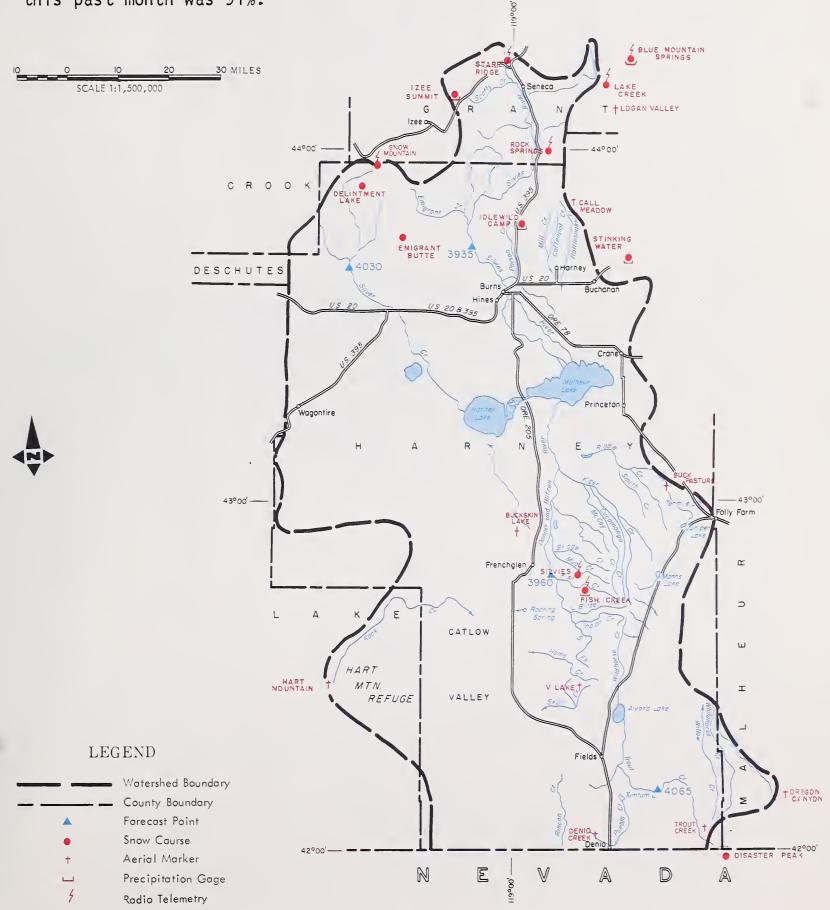
| RIVER BASIN and/or | Number of Courses | THIS YEAR'S SNOW WATER AS PERCENT OF | | |
|---|-----------------------|---------------------------------------|-------------------------------------|--|
| SUB-WATERSHED | Averaged | Last Year | Average C | |
| Chewaucan River Deep Creek Drew Creek Honey Creek Silver Creek Twentymile Creek | 3 3 3 3 2 | 149 137 159 139 71 186 | 96 122 90 129 37 196 | |

⁽a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK HARNEY BASIN WATERSHEDS OREGON

GENERAL OUTLOOK

Harney County should experience below average supplies on Silver Creek and the Silvies drainages and average supplies on streams emanating from the Steens Mountains. The snowpack is below normal in the north half of the county and normal to above in the south half. Precipitation this past month was 91%.



25

| STREAMFLOW FORECASTS | | PAST RECORD | | | |
|--|--------------------------------------|-----------------------------------|--|--------------------|-------------------------------------|
| BASIN, STREAM and/or FORECAST POINT | FORE | CAST | FORECAST | THOUSAND ACRE FEET | |
| | Thousand Acre Feet | Percent of Average | PERIOD | Last Year | Average (|
| Donner und Blitzen near Frenchglen Silver near Riley Silvies River near Burns Trout Creek near Denio | 53 51 11.1 79 63 10.1 | 90 90 70 82 82 109 | March-July April-Sept. April-July March-July April-Sept. March-July | | 59 57 15.8 96 77 9.3 |

SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

| RIVER BASIN and/or | Number of Courses | | AR'S SNOW PERCENT OF |
|-----------------------|----------------------|-----------|-------------------------|
| SUB-WATERSHED | Averaged | Last Year | Average C |
| | Averaged - 2 4 - | | |
| | | | |

| Date of Survey | Snow Depth (In.) | Water Cont. (In.) | | es) | | DRAINAGE BASIN and/or SNOW COURSE | Date | Snow | Water | Water C | |
|----------------------|---|-------------------------|---------------------------|---|------|--|------|-----------------------------------|----------|---------|------|
| | | | (Inches) Last Yr., Ave. C | | | DIATINAGE BASIN BIO/ OF SINOW COURSE | | af Depth Cant. Survey (In.) (In.) | Last Yr. | | |
| | | | | | | BURNT, POWDER, PINE, GRANDE | | | | | |
| 1 | e | | | | | RONDE, IMNAHA WATERSHEDS | | | | | |
| N/R | | 14.0 | | 2.8 | 7 | Aneroid Lake #2 | 1/29 | 65 | 18.6 | | |
| 1/28 | 47 | 14.0 | 9.9 | 13.8 | b | Aneroid Lake #2 Plw.(S) Aneroid Lake #2 Plw.(M) | 1/29 | 60 | 17.5 | | |
| 1/30 | 34 | 10.6 | 7.9 | 12.1 | | Anthony Lake | 1/30 | 52 | 15.1 | | |
| 1/30 | 34 | 10.1 | 9.0 | 11.8 | Ъ | Beaver Reservoir (Rev.) | | 29 | | | |
| 1/30 | | 9.7 | 10.2 | 9.0 | Ъ | Beaver Res. Pillow(S) | 1/30 | 24 | 4.8 | 8.7 | |
| N/R | | | | 1.4 | | Beaver Res. Pillow(M) Bigelow Camp Pillow (S) | | e | | | |
| | e | | | | | Bigelow Camp Pillow (M) | 1/27 | e 67 | 10 4 | 11 1 | 19. |
| N/R | | | | 1.3 | | Blue Mtn. Summit | 1/30 | 22 | 5.3 | 6.1 | 6. |
| N/R | | | | | | Bourne | 1/30 | 34 | | | 11. |
| 1/26 | 20 | 5.4 | | | | Bourne Pillow (I) | 1/30 | 37 | | 10.5 | |
| 1/20 | 12 | 2.5 | 2 0 | 3 2 | | Bourne Pillow (M) | 1/30 | 11 | | 1 | |
| 1/25 | 14 | 3.5 | 6.0 | 4.2 | | County Line County Line Pillow (T) | 1/29 | '' | 2.0 | | |
| N/R | | | | 16.3 | Ъ | County Line Pillow (S) | 1/29 | 7 | 1.8 | 5.0 | |
| 2/1 | | 20.0 | | | | | 1/29 | 21 | | | |
| | е | | | | | Eilertson Meadows | 1/30 | 26 | | | |
| N/R | | | | 3.9 | | Eilertson Mdws. Plw.(S) | 1/30 | | 4.2 | 3.0 | |
| 1 /21 | 10 | 5.0 | 5.6 | 5.2 | | Eldorado Pass | 1/29 | 13 | | | |
| 1/28 | 16 | 4.0 | 5.6 | 4.0 | | | 1/30 | 25 | /.\ | | |
| N/D | е | | | A 2 | | Gold Center Pillow (S) | 1/30 | 24 | | | |
| N/K | е | | | | | | 1/30 | 71 | | 19.2 | 27. |
| 1/28 | 23 | 6.1 | 8.5 | | | Little Alps | 1/30 | 29 | | | |
| 1/28 | 25 | 6.4 | 6.9 | 7.6 | | | 1/30 | 22 | | 6.6 | |
| | 00 | | | | | Lucky Strike | 1/29 | 20 | | | 8. |
| | 28 | | | | | Lucky Strike Pillow (1) Lucky Strike Pillow (S) | | 15 | | 7.7 | d |
| 1/28 | 28 | 6.8 | ţ | | | Lucky Strike Pillow (M) | 1/29 | 12 | | | |
| 1 ' | | | | | | | | 1 | | 26.5 | 47. |
| N/R | | | | 3.3 | | Moss Spring | 1/30 | 42 | | 13.4 | |
| 1/26 | 14 | 3.4 | 5.5 | 4.4 | Ъ | | 1 | 47 | 13.5 | 14.0 | |
| 1/26 | 1 | 0.1 | | | | Moss Spring Pillow (M) | 1/30 | | | | |
| N/R | e | | | 3.7 | | Mt. Howard Pillow(S) Mt. Howard Pillow(M) | | | | | |
| N/R | | | | 1.5 | | Schneider Meadow | 1/27 | 60 | 19.2 | 13.4 | 21. |
| | 15 | 3.8 | 1 | | | | | | 19.2 | 13.4 | |
| | | | | | | Schneider Meadow Plw.(M) | | | 13.8 | 11.3 | |
| | | | | | | | 1/27 | | | | |
| 1/31 | 16 | | | | | Taylor Green | | | | | |
| 1/28 | 31 e | 0.0 | 0.2 | | | Taylor Green Pillow(S) | | | 11.8 | 13.3 | |
| N/R | | | | | | Taylor Green Pillow(M) | | | | | |
| N/R | e | | | 3.0 | | | | | 7.7 | 7 | |
| 2/1 | | 10.7 | | | | Tipton Pillow (S) | | | | | 1 |
| | e | | | | | | 1/29 | 50 | 16. | 1 17. | 17 |
| | | | | 1 | | TV Ridge * | | | | | |
| | | | 5.0 | 3.7 | | Wolf Creek Pillow (T) | 1/30 | | 9.1 | 5 | - |
| 1/31 | | 3.7 | 1 | | | Wolf Creek Pillow (S) | | | | | |
| 1/31 | 10 | 2.3 | 3.8 | 4.0 | | | 1/30 | | 0., | 1 | |
| 1/26 | 24 | 6.5 | 8.0 | 7.2 | | | | | | | |
| 1/31 N/R | 2 | 0.8 | 1.4 | | | * Aerial | | | | | |
| N/R | | | | | | N/R No Report | | | | | |
| | | | - | | | | | | | | |
| | | | | | | S = Snow Tube Measurement | | | | | |
| | 1/30 1/30 1/30 1/30 1/30 N/R N/R N/R N/R 1/26 1/29 1/25 N/R 2/1 N/R 1/28 1/28 1/30 1/30 1/30 1/28 N/R N/R N/R 1/26 N/R N/R N/R 1/26 N/R N/R 1/26 N/R N/R 1/29 1/29 1/31 1/28 N/R N/R 1/29 1/29 1/31 1/28 1/26 1/31 N/R 1/21 1/28 1/28 1/26 1/31 N/R 1/31 1/26 1/31 N/R | 1/30 | 1/30 | 1/30 1/30 1/30 1/30 1/30 1/30 1/30 1/30 | 1/30 | 1/30 | 1/30 | 1/30 | 1/30 | 1/30 | 1/30 |

⁽a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

| NOW | | HIS YEAR | | | RECORD | SNOW | THIS YEAR | | PAST RECOR | | |
|--|--|--|---|--|--|--|--|---|--|---|--|
| PRAINAGE BASIN and/or SNOW COURSE | Date of Survey | Snaw Depth (In.) | Water Cont. (In.) | (Inc | Cantent hes) | DRAINAGE BASIN and/ar SNOW COURSE | Date af Survey | Snaw Depth | Water Cont. | Water (Inc Last Yr. | hes) |
| UMATILLA, WALLA WALLA, VILLOW, ROCK, LOWER JOHN DAY WATERSHEDS Arbuckle Mountain 1/29 | | 22 | 6.3 | 8.9 | 7.3 | UPPER DESCHUTES, CROOKED WATERSHEDS Bald Peter Caldwell Ranch Cascade Summit | 1/28 1/31 1/30 | 57 14 30 | 18.0 4.9 9.2 | 10.6 4.2 7.2 | 20.2 8.0 20.8 |
| Arbuckle Mtn. Plw.(T) Arbuckle Mtn. Plw.(S) Arbuckle Mtn. Plw.(M) Blue Mountain Camp Bowman Springs Plw.(T) Bowman Springs Plw.(S) Bowman Springs Plw.(M) | 1/29 1/29 1/29 1/29 1/29 1/29 | 39 15 18 | 11.4 13.1 5.2 5.8 4.8 4.5 | 10.7 11.0 12.9 8.0 10.3 | 14.7b 12.1 | Cascade Summit Plw.(S) Cascade Summit Plw.(M) Chemult Alternate Chemult Alt. Plw.(S) Chemult Alt. Plw.(M) Derr | 1/30 1/30 2/1 2/1 2/6 | 40 16 13 | 12.3 8.6 4.1 4.0 6.5 | 8.4 2.0 | 9.8 |
| Butte Creek Summit Emigrant Springs Emigrant Springs Plw.(S) Emigrant Springs Plw.(M) High Ridge Pillow(T) High Ridge Pillow(S) High Ridge Pillow(M) Lucky Strike Lucky Strike Pillow(T) Lucky Strike Pillow(S) Lucky Strike Pillow(M) Madison Butte Pillow(T) Madison Butte Pillow(S) Madison Butte Pillow(M) Meacham Tollgate | N/R 1/29 1/29 1/31 1/31 1/31 1/29 1/29 1/29 1/29 1/29 1/29 1/29 1/2 | 7 11 47 20 15 11 13 50 | 1.7 2.5 1.1 14.1 13.7 13.6 5.1 3.9 3.0 2.9 3.1 1.7 3.8 16.1 | 3.0 7.0 8.8 18.1 12.7 8.9 7.7 10.8 7.2 7.3 7.4 17.5 | 4.2 22.6 22.3b 8.6 7.5 17.9 | Derr Pillow (T) Derr Pillow (S) Derr Pillow (M) Hogg Pass Hogg Pass Pillow(T) Hogg Pass Pillow(S) Hogg Pass Pillow (M) Hungry Flat Irish-Taylor Pillow(T) Irish-Taylor Pillow(S) Irish-Taylor Pillow(M) Lionshead * Marks Creek New Crescent Lake New Crescent Lake Plw.(S) New Crescent Lake Plw.(M) | 2/6 2/6 1/29 1/29 1/29 1/29 2/1 2/1 2/1 2/1 1/29 1/30 1/30 1/30 | 35 38 43 57 36 4 16 18 | 10.5 9.6 12.1 13.9 14.4 14.6 0.0 20.6 18.8 19.9 11.2 0.4 5.6 5.5 3.6 | 12.4 13.5 10.2 3.7 11.1 11.4 7.6 6.0 2 4.0 3.9 4.4 | 2.8 10.4 |
| UPPER JOHN DAY WATERSHEDS Anthony Lake Arbuckle Mountain Arbuckle Mountain Plw.(T) Arbuckle Mountain Plw.(S) Arbuckle Mountain Plw.(M) Blue Mountain Springs Blue Mtn. Spgs. Plw.(T) Blue Mtn. Spgs. Plw.(S) Blue Mtn. Spgs. Plw.(M) Blue Mountain Summit Bute Creek Summit Derr Derr Pillow (T) Derr Pillow (S) Derr Pillow (M) Gold Center | 1/30 1/29 1/29 1/29 1/30 1/30 1/30 1/30 N/R 2/6 2/6 2/6 1/30 | 52 22 39 34 22 22 22 25 | 15.1 6.3 11.4 13.1 10.6 10.1 10.0 9.7 5.3 6.5 10.5 9.6 7.1 | 14.5 8.9 10.7 11.0 7.9 9.0 10.2 6.1 3.0 7.0 | 9.0b 6.9 7.1 | New Dutchman Flat #2 Ochoco Meadows Ochoco Meadows Plw.(T) Ochoco Meadows Plw.(S) Ochoco Meadows Plw.(M) Racing Creek Snow Mountain Snow Mountain Plw.(T) Snow Mountain Plw.(S) Snow Mountain Plw.(M) Summit Lake Pillow (T) Summit Lake Pillow (S) Summit Lake Pillow (M) Tamarack Tangent Three Creek Butte Three Creek Mdw. Three Creek Mdw. Plw.(T) Three Creek Mdw. Plw.(S) | 2/1 1/31 1/31 1/28 2/4 2/1 2/4 2/4 2/4 2/4 1/30 1/30 2/1 1/28 1/28 1/28 | 86 21 28 17 26 27 56 9 42 12 18 | 34.1 7.0 8.5 7.0 4.8 7.2 6.0 5.5 5.7 18.0 16.9 2.8 15.0 3.2 5.4 | 5.0 5.8 7.8 6.4 7.0 9.5 7.3 8.8 3.1 4.1 | 6.7 7.7 9.5 8.6 27.9 17.2 8.4 12.8 |
| Gold Center Plw.(T) Gold Center Plw.(S) Gold Center Plw.(M) Izee Summit Lucky Strike Lucky Strike Plw.(T) Lucky Strike Plw.(S) Lucky Strike Plw.(M) Marks Creek Ochoco Meadows Ochoco Mdws. Plw.(T) Ochoco Mdws. Plw.(S) Ochoco Mdws. Plw.(M) Olive Lake * Schoolmarm Snow Mountain Plw.(T) Snow Mountain Plw.(S) Snow Mountain Plw.(S) Snow Mountain Plw.(M) Starr Ridge Starr Ridge Plw.(T) Starr Ridge Plw.(S) Starr Ridge Plw.(M) Tipton Tipton Pillow (T) Tipton Pillow (M) | 1/30 1/30 1/29 1/29 1/29 1/29 1/29 1/30 1/31 1/31 1/30 2/4 2/1 2/4 /24 1/31 1/31 1/30 1/30 1/30 1/30 | 24 16 20 15 4 21 28 39 e 26 10 15 27 23 28 | 6.4 5.2 4.6 5.1 3.9 3.0 2.9 0.4 7.0 8.5 7.0 12.1 7.2 6.0 5.5 5.7 2.8 4.0 3.7 6.5 7.9 4.8 | 4.3 6.5 5.0 8.7 7.8 6.4 7.0 5.6 6.0 3.1 6.5 | 5.7 8.6 2.8 6.7 13.4b 9.5b 8.6b 4.6 | Greenpoint Pillow(S) Greenpoint Pillow(M) Mt. Hood Test Site (T) Mt. Hood Test Site (S) Mt. Hood Test Site (M) Mud Ridge Pillow(T) Mud Ridge Pillow(S) Mud Ridge Pillow(M) Red Hill Red Hill Pillow(S) | 1/28 1/31 1/29 1/30 1/30 1/27 1/27 1/27 1/27 1/27 1/27 1/29 1/29 1/29 1/30 1/30 1/30 1/30 1/30 1/29 1/27 1/26 | 30 6 16 28 28 41 51 50 63 65 39 37 63 | 7.4 9.9 1.7 4.4 7.6 7.6 12.5 13.1 14.2 11.3 39.3 40.9 16.2 12.5 11.6 21.2 29.4 12.8 | 6.8 4.0 3.6 7.2 7.2 6.0 6.4 17.8 10.0 10.3 11.9 12.6 15.6 9.8 12.6 15.6 9.8 15.6 | 7. 7. 11. 12 21. 37. 38 26. 37. 38. 37. 38. 39. 39. 39. 39. 39. 39. 39. 39. 39. 39 |

| SNOW | Т | HIS YEAR | 2 | PAST R | ECORD | SNOW | Т | THIS YEAR | | PAST RI | CORD |
|---|-------------|---------------|----------------|------------|-----------|---|-------------|---------------|----------------|------------|--------|
| DRAINAGE BASIN and/or SNOW COURSE | Date of | Snow Depth | Water Cont. | Water (| es) | DRAINAGE BASIN and/or SNOW COURSE | Date af | Snow Depth | Water Cant. | Water C | es) |
| | Survey | (in.) | (ln.) | Last Yr. | Ave, C | | Survey | (ln.) | (ln.) | Last Yr. | Ave. C |
| LOWER COLUMBIA WATERSHED | | | | | | WILLAMETTE WATERSHEDS(CONT. | P | | | | |
| Blazed Alder Pillow(T) | N/R | | | | | Salt Creek Falls | 1/30 | 3 | 0.8 | 3.4 | 11.3 |
| Blazed Alder Pillow(S) Blazed Alder Pillow(M) | | | | | | Salt Creek Falls Plw.(S) Salt Creek Falls Plw.(M) | 1/30 | | 3.0 | | |
| Mt. Hood Test Site(T) | 2/1 | 106 | 39.3 | 23.5 | 37.3b | Santiam Junction Santiam Junction Plw.(T) | 1/29 | 15 | 5.0 | 7.8 | 17.8 |
| Mt. Hood Test Site(S) Mt. Hood Test Site(M) | 2/1 | | 40.9 | 17.8 | | Santiam Junction Plw.(S) | 1/29 | 18 | 6.3 | 7.9 | |
| Mud Ridge Pillow(T) Mud Ridge Pillow(S) | 1/29 | 50 | 16.2 | 10.0 | 21.8 | Santiam Junction Plw.(M) Seine Creek Pillow(T) | 1/29 N/R | | 4.1 | 3.6 | |
| Mud Ridge Pillow(M) | 1/29 | | 14.4 | 10.3 | | Seine Creek Pillow(S) Seine Creek Pillow(M) | | | | | |
| No. Fork Res. (T) No. Fork Res. (S) | 2/1 | | 9.3 | 6.3 | | Still Creek | 1/29 | 39 | 12.8 | 9.8 | 17.1 |
| No. Fork Res. (M) Still Creek | 1/29 | 39 | 12.8 | 9.8 | 17.1 | Summit Lake Pillow(T) Summit Lake Pillow(S) | 1/30 | 56 | 18.0 | 9.5 | 27.9 |
| | 1/23 | 39 | 12.0 | 7.0 | ., | Summit Lake Pillow(M) | 1/30 | 22 | 16.9 6.4 | 7.3 4.2 | 9.6 |
| WILLAMETTE WATERSHEDS | | | | | | Timothy Lake Waldo Lake | 1/29 | 30 | 9.9 | 6.8 | 20.9 |
| Cascade Summit | 1/30 | 30 | 9.2 | 7.2 | 20.8 | Weaver Creek White Branch Slide | 1/30 2/1 | TR 0 | 0.1 | 0.8 | 0.6 |
| Cascade Summit Pillow(T) Cascade Summit Pillow(S) | 1/30 | 40 | 12.3 | 8.4 | | Whitewater Bridge | 1/29 | 8 | 2.1 | 2.7 | 5.0 |
| Cascade Summit Pillow(M) Champion | 1/30 | 14 | 8.6 | 6.2 | 19.8b | ROGUE, UMPQUA WATERSHEDS | | | | | |
| Clackamas Lake | 1750 | e | | 0.2 | | | 1/30 | 0 | 0.0 | 0.3 | 6.7 |
| Clackamas Lake Plw.(S) Clackamas Lake Plw.(M) | | e | ł | | | Althouse Annie Spring | 2/1 | 68 | 14.4 | 9.7 | 30.2 |
| Clear Lake | 1/30 | 16 28 | 4.4 7.6 | 3.6 7.2 | 7.7 | Beaver Dam Creek Big Red Mountain | 2/1 1/23 | 11 | 4.1 | 1 | |
| Clear Lake Pillow(S) Clear Lake Pillow(M) | | | } | | | Big Red Mountain Plw.(T) | | 40 | 12.5 | | |
| Clear Lake Expt. Daly Lake Plw.(T) | 1/30 | 28 | 7.6 | 7.2 | 11.7 | Big Red Mountain Plw.(S) Big Red Mountain Plw.(M) | 1/23 | | | | |
| Daly Lake Plw.(S) | 1/28 | TR | 0.1 | | | Billie Creek Divide Billie Cr. Div. Pillow(T) | 1/29 | 26 | 7.6 9.3 | | 15.3 |
| Daly Lake Plw.(M) Dead Horse Grade | 2/1 | 4 | 2.3 | 6.1 | 11.8 | Billie Cr. Div. Pillow(S) | 1/29 | 28 | 8.3 8.6 | 4.0 | |
| Golden Curry Creek Hogg Pass | 1/30 | TR 38 | 0.1 | 0.9 | 4.6b | Billie Cr. Div. Pillow(M) Caliban | 1/29 | 61 | 20.8 | 3.7 | 25.3 |
| Hogg Pass Pillow(T) | 1/29 | 42 | 13.9 | 13.5 | | Caliban (Alternate) Champion | 1/25 | 56 | 20.4 | | |
| Hogg Pass Pillow(S) Hogg Pass Pillow(M) | 1/29 | 43 | 14.4 | | | Cold Springs Camp | 1/31 | 52 | 17.2 | | |
| Holland Meadows Plw.(S) Holland Meadows Plw.(M) | 1/28 | 14 | 4.9 | | | Cold Springs Camp Plw.(T) Cold Springs Camp Plw.(S) | 1/31 | 32 | 10.2 | | |
| Jump Off Joe Pillow(T) | 1/29 | | 1.1 | | | Cold Springs Camp Plw.(M) Deadwood Junction | 1/31 2/1 | 8 | 10.6 | | |
| Jump Off Joe Pillow(S) Jump Off Joe Pillow(M) | 1/29 | 8 | 2.3 | 4.2 3.1 | | Diamond-Crater Summit | | e | | | |
| Layng Creek Little Meadows Plw.(T) | 1/30 1/28 | TR | 0.1 | | | Diamond Lake Diamond Lake Pillow(S) | 1/28 | 20 21 | 6.2 6.1 | | |
| Little Meadows Plw.(S) | 1/28 | 13 | 4.8 | | | Diamond Lake Pillow(M) Fish Lake | 1/28 | 15 | 5.2 | | 10.4 |
| Little Meadows Plw.(M) Lost Creek Ranch | 1/28 | TR | 3.6 | 0.7 | 3.9 | Fish Lake Pillow(T) | | | | | |
| Lund Park Marion Forks | 1/30 | TR 10 | 0.1 | 0.0 | 9.6 | Fish Lake Pillow(S) Fish Lake Pillow(M) | 1/29 | 17 | 5.7 | 3.3 | |
| Marion Forks Pillow(T) | | | - | | | Fourmile Lake | 1/29 | 31 | 10.4 | 5.7 | 14.1 |
| Marion Forks Pillow(S) Marion Forks Pillow(M) | 1/29 | 10 | 3.0 | 1 | | Fourmile Lake Pillow(T) Fourmile Lake Pillow(S) | 1/29 | 45 | 14.7 | 7.5 | |
| Marys Peak McCredie Springs | N/R 1/30 | 0 | 0.0 | 0.5 | 0.5 | Fourmile Lake Pillow(M) Grayback Peak | 1/24 | 25 | 9.2 | | |
| McKenzie | 2/1 | 43 | 17.1 | 13.5 | 31.6 | Howard Prairie Reservoir Hyatt Prairie | 2/1 2/1 | 9 4 | 3.4 | | |
| McKenzie Pillow(S) McKenzie Pillow(M) | 2/1 | 38 | 15.3 | 12.8 | | Hyatt Prairie Pillow(T) | | _ | | | |
| Mt. Hood Test Site (T) Mt. Hood Test Site (S) | 2/1 | 106 | 39.3 | 23.5 | 37.3 | Hyatt Prairie Pillow(S) Hyatt Prairie Pillow(M) | 2/1 | | 5.9 | 1.4 | |
| Mt. Hood Test Site (M) | 2/1 | | 40.9 | | | King Mountain #1 | 1/28 | 0 | 0.0 | | 5.2 |
| Peavine Ridge Pillow(T) Peavine Ridge Pillow(S) | N/R | | | | | King Mountain #2 King Mountain #2 Plw.(T) | | | |] ''- | |
| Peavine Ridge Pillow(M) | 1/30 | 0 | 0.0 | 0.7 | 1.7 | King Mountain #2 Plw.(S) King Mountain #2 Plw.(M) | | | | | |
| Railroad Overpass Railroad Overpass Plw.(T) | | | | | | King Mountain #3 | 1/28 | | 0.0 | | |
| Railroad Overpass Plw.(S) Railroad Overpass Plw.(M) | 1/30 | 0 | 0.0 | 1 | | King Mountain #4 King Mountain #5 | 1/28 | 0 | 0.0 | 0.4 | |
| Roaring River Plw.(T) | | | | | | King Mountain #6 Little Red Mountain | 1/28 | 0 | 0.0 | | |
| Roaring River Plw.(S) Roaring River Plw.(M) | 1/28 | 30 | 9.8 | | | Mt. Ashland Switchback | 1/25 | 70 | 21.0 | | |
| Saddle Mtn. Pillow(T) Saddle Mtn. Pillow(S) | 1/27 | | 4.6 | | | Mule Creek North Umpqua | 1/28 | 7 | 3. | 2.8 | 11.6 |
| Saddle Mtn. Pillow(S) | | | | | | Page Mountain Park Headquarters | 1/30 2/1 | 94 | 26.2 | I . | |
| | | | | | | raik neauquarters | | | | | |
| | 1 | | L | L | | | 1 | 1 | | h ashad | |

| WONS | | HIS YEAR | | | ECORD | SNOW | THIS YEAR | | | PAST RECORD | |
|---|---|---|--|---|--|--|--|--|--|--|--|
| DRAINAGE BASIN and/or SNOW COURSE | Date of Survey | Snow Depth (In.) | Woter Cont. (In.) | (Inc | Content hes) Ave. C | DRAINAGE BASIN and/or SNOW COURSE | Dote of Survey | Snow Depth (In.) | Woter Cont. (In.) | Woter C (incl Last Yr. | nes) |
| ROGUE, UMPQUA WATERSHEDS(CO | NT.) | | | | | LAKE COUNTY, GOOSE LAKE | | | | | |
| Red Butte #1 Red Butte #2 Red Butte #3 Red Butte #4 Red Butte #5 Red Butte #6 Seven Mile Seven Mile Pillow(T) Seven Mile Pillow(S) Seven Mile Pillow(M) Silver Burn Siskiyou Summit Ski Bowl Road South Fork Canal Trap Creek | 1/28 1/28 1/28 1/28 1/28 1/28 1/30 1/30 2/1 1/30 1/25 1/31 | 0 0 0 0 0 0 43 38 9 0 51 0 | 0.0 0.0 0.0 0.0 0.0 14.3 13.0 13.4 3.5 0.0 15.6 0.0 | 1.8 1.5 1.0 0.8 0.0 5.3 6.0 2.2 1.6 1.2 3.2 0.0 2.8 | 8.8b 6.0 3.1 1.6 0.5 20.9b 10.4 6.6 20.6b 3.0b 9.9 | WATERSHEDS Adin Mountain (Calif.) Bald Mountain (Nev.) Bear Flat Meadow * Camas Creek #1 Camas Creek #2 Cedar Pass (Calif.) Colvin Creek * Cox Flat * Crowder Flat (Calif.) * Dismal Swamp (Calif.) * Finley Corrals * Hart Mountain * Little Bally Mtn.(Nev.) * Mt. Bidwell (Calif.) North Star (Calif.) | 1/21 1/28 1/28 1/30 1/30 1/28 1/28 1/28 1/28 1/28 1/28 1/28 | 25 15 27 23 28 41 14 6 0 64 45 4 12 e | 8.4 5.0 8.9 6.9 8.5 13.6 4.2 2.0 0.0 21.1 15.0 1.2 4.0 | 3.3 3.4 5.6 5.9 6.8 7.5 3.4 1.1 10.6 2.8 2.5 | 8.8 |
| KLAMATH WATERSHEDS | | | | ; | | Patton Meadows * Quartz Mountain | 1/28 | 38 15 | 12.5 | 9.0 | 11.3 |
| Annie Spring Billie Creek Divide Billie Cr. Div. Plw.(T) Billie Cr. Div. Plw.(S) Billie Cr. Div. Plw.(M) Chemult Alternate Chemult Alternate Plw.(S) Chemult Alternate Plw.(M) Chiloquin (PP&L) Cold Springs Camp Cold Spgs. Camp Plw.(T) | 2/1 1/29 1/29 1/29 1/29 2/1 2/1 N/R 1/31 | 68 26 28 16 13 | 14.4 7.6 9.3 8.3 8.6 4.1 4.0 | 9.7 5.1 4.0 4.7 2.0 | 30.2 | Quartz Mtn. Ext. Quartz Mtn. Plw. (T) Quartz Mtn. Plw. (S) Quartz Mtn. Plw. (M) Rogger Meadows * Sherman Valley * Silver Creek Silver Creek Pillow(S) Silver Creek Pillow(M) State Line (Calif.) * Strawberry * | 1/30 1/30 1/28 1/28 1/25 1/31 1/31 1/28 1/28 | 16 36 40 TR 20 15 | 6.0 4.4 10.8 12.0 0.1 6.2 2.5 5.0 4.0 | 2.9 2.5 9.5 7.3 1.0 4.5 2.8 4.2 | 7.3 2.1 6.4 5.4 |
| Cold Spgs. Camp Plw.(S) Cold Spgs. Camp Plw.(M) | 1/31 1/31 | 32 | 10.2 | 7.0 5.4 | | Strawberry Pillow(S) Strawberry Pillow(M) | | | | | |
| Crazyman Flat * Crowder Flat (Calif.) * Crystal (PP&L) | 1/28 1/28 1/29 | 20 0 TR | 6.7 0.0 0.1 | 3.6 | 6.8 2.6 7.1 <i>b</i> | Summer Rim * Summer Rim Summer Rim Pillow(T) | 2/1 | 36 e | 11.5 | 7.3 | 11. |
| Diamond-Crater Summit Dog Hollow * Finley Corrals * Fort Klamath (PP&L) | 1/28 1/28 1/29 | 0 45 0 | 0.0 15.0 0.0 | 0.6 | 1.0 11.5 3.2b | Summer Rim Pillow(S) Summer Rim Pillow(M) Sycan Flat * | 1/28 | e e 6 | 1.9 | 3.6 | 5. |
| Fourmile Lake Fourmile Lake Pillow(T) Fourmile Lake Pillow(S) Fourmile Lake Pillow(M) Gerber Harriman (PP&L) Howard Prairie Hyatt Prairie Reservoir Hyatt Prairie Res.Plw.(T) | 1/29 1/29 2/1 1/29 2/1 2/1 | 31 45 0 TR 9 4 | 10.4 14.7 0.0 0.1 3.4 1.6 | 5.7 7.5 0.6 3.0 1.7 | 14.1b 2.4 4.1b 5.8 6.4 | HARNEY BASIN WATERSHEDS Blue Mountain Springs Blue Mtn. Spgs. Plw.(T) Blue Mtn. Spgs. Plw.(S) Blue Mtn. Spgs. Plw.(M) Buck Pasture * Buckskin Lake * Call Meadows * | 1/30 1/30 1/30 1/30 1/30 M/R N/R | 34 34 | 10.6 10.1 10.0 9.7 | 7.9 9.0 10.2 | 12. 11. 9. 1. 0. 2. |
| Hyatt Prairie Res.Plw.(S) Hyatt Prairie Res.Plw.(M) | 2/1 | | 5.9 | 1.4 | | Delintment Lake Denio Creek * | N/R | е | | | 0. |
| Kirk (PP&L) Park Headquarters Ouartz Mountain | N/R 2/1 1/30 | 94 | 26.2 | 16.9 | 41.1 | Disaster Peak (Nev.) Emigrant Butte Fish Creek * | 1/30 N/R | 0 | 0.0 | 4.1 | 2. |
| Quartz Mtn. Ext. Quartz Mtn. Pillow(T) Quartz Mtn. Pillow(S) Quartz Mtn. Pillow(M) | 1/30 | 16 | 6.0 | 2.9 | | Fish Creek Fish Creek Pillow(T) Fish Creek Pillow(S) Fish Creek Pillow(M) | 2/1 | e e e | 20.0 | | |
| Seven Mile Seven Mile Pillow(T) Seven Mile Pillow(S) | 1/30 | 43 | 14.3 | 5.3 | 20.9 ^b | Hart Mountain * Idlewild Camp Alt. Izee Summit | 1/28 1/30 1/29 | 4 0 16 | 1.2 0.0 4.6 | 4.7 | 0. 4. 5. |
| Seven Mile Pillow(M) State Line (Calif.) * Strawberry * Strawberry Pillow(S) | 1/30 1/28 1/28 | 15 12 | 13.4 5.0 4.0 | 2.2 2.8 4.2 | 6.4 5.4b | Lake Creek R.S. Lake Creek R.S. Plw.(T) Lake Creek R.S. Plw.(S) Lake Creek R.S. Plw.(M) | 1/30 1/30 1/30 | 25 | 7.0 6.5 | 6.9 8.0 6.5 | 7. |
| Strawberry Pillow(M) Summer Rim * | 1/28 | 36 | 11.5 | | 11.0b | Oregon Canyon * Rock Spring Rock Spring Pillow (T) | N/R 1/29 | 15 | 3.8 | 5.4 | 3. 4. |
| Summer Rim Summer Rim Pillow(T) Summer Rim Pillow(S) | 2/1 | e e | 10.4 | | | Rock Spring Pillow (1) Rock Spring Pillow (S) Rock Spring Pillow (M) Silvies * | 1/29 | 10 | 3.0 | 5.5 | |
| Summer Rim Pillow(M) Sycan Flat * Taylor Butte | 1/28 | 6 7 | 1.9 | 1.3 | 5.4 | Silvies Silvies Pillow (T) | N/R 2/1 | e | 10.7 | | 5. |
| Taylor Butte Pillow(T) Taylor Butte Pillow(S) Taylor Butte Pillow(M) | 1/29 1/29 1/29 | 11 | 3.9 3.5 1.9 | 1.5 | | Silvies Pillow (S) Silvies Pillow (M) Snow Mountain Snow Mountain Plw.(T) Snow Mountain Plw.(S) Snow Mountain Plw.(M) Starr Ridge Starr Ridge Pillow(T) | 2/4 2/1 2/4 2/4 1/31 | 26 27 10 | 7.2 6.0 5.5 5.7 2.8 | 7.8 6.4 7.0 5.6 | 9. 8. 4. |
| | | | | | | Starr Ridge Fillow(S) Starr Ridge Pillow(S) Starr Ridge Pillow(M) Stinking Water Trout Creek "V" Lake | 1/31 1/31 1/31 N/R N/R | 15 11 | 4.0 3.7 3.7 | 6.0 3.1 3.2 | 2.4.4 |

| RECIPITATION (Inches) | | CURRENT IN | FORMATION | PAST R | ECORD |
|--|-----------|-----------------------|--------------------|-----------|---------|
| DRAINAGE BASIN and PRECIPITATION GAGE LOCATION | ELEVATION | Date of Reading | Precip- itation | Last Year | Average |
| Arbuckle Mountain (Morrow County) | 5400 | From 12/29 To 1/29 | 4.50" | | |
| Beaver Reservoir (Union County) | 5150 | From 12/29 To 1/29 | 3.96" | | |
| Billie Creek Divide (Jackson County) | 5310 | From 12/28 To 1/29 | 6.72" | | |
| Blue Mt. Springs (Grant County) | 5900 | From 1/2 To 1/30 | 6.24 | | |
| Bourne (Baker County) | 5800 | From 6/21 To 1/30 | 21.48 | | |
| Bowman Springs (Union County) | 4580 | From 12/29 To 1/29 | 2.62" | | |
| Cascade Summit (Lane County) | 4880 | From 8/8 To 1/30 | 33.36 | | |
| Chemult (Klamath County) | 4760 | From 9/19 To 2/1 | 17.28" | | |
| Clear Lake (Wasco County) | 3500 | From 12/27 To 1/30 | 11.88" | | |
| Cold Springs (Klamath County) | 6100 | From 6/12 To 1/31 | 36.00" | | |
| County Line (Umatilla County) | 4800 | From 12/29 To 1/29 | 2.64" | | |
| Daly Lake (Linn County) | 3600 | From 12/26 To 1/28 | 12.00" | | |
| Derr (Wheeler County) | 5670 | From 6/27 To 2/6 | 13.80" | | |
| Diamond Lake (Douglas County) | 4600 | From 12/27 To 1/28 | 10.44" | | |
| Eilertson Meadow (Baker County) | 5400 | From 12/26 To 1/30 | 5.76" | | |
| Emigrant Springs (Umatilla County) | 3925 | From 12/29 To 1/29 | 4.08" | | |
| Fish Lake (Jackson County) | 4665 | From 12/28 To 1/29 | 5.76" | | |
| Fourmile Lake (Klamath County) | 6000 | From 10/3 To 1/29 | 28.68" | | |
| Gold Center (Grant County) | 5340 | From 12/26 To 1/30 | 3.48" | | |
| Greenpoint (Hood River County) | 3200 | From 9/6 To 1/27 | 44.04" | | |
| High Ridge (Umatilla County) | 4150 | From 1/2 To 1/31 | 6.0" | | |
| Hogg Pass (Jefferson County) | 4755 | From 12/28 To 1/29 | 18.24" | | |
| Hyatt Prairie (Jackson County) | 4900 | From 12/31 To 2/1 | 4.92" | | |

⁽a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

| PRECIPITATION (Inches) | | CURRENT IN | FORMATION | PAST F | ECORD |
|--|-----------|-----------------------|--------------------|-----------|---------|
| DRAINAGE BASIN and PRECIPITATION GAGE LOCATION | ELEVATION | Date of Reading | Precip- itation | Last Year | Average |
| Irish-Taylor (Deschutes County) | 5500 | From 8/9 To 2/1 | 36.00" | | |
| Jump Off Joe (Linn County) | 3400 | From 12/28 To 1/29 | 16.08" | | |
| Lake Creek (Grant County) | 5120 | From 1/2 To 1/30 | 5.40" | | |
| Little Meadows (Linn County) | 4000 | From 12/26 To 1/28 | 21.84" | | |
| Lucky Strike (Umatilla County) | 5050 | From 12/29 To 1/29 | 3.25 | | |
| Madison Butte (Morrow County) | 5250 | From 12/29 To 1/29 | 2.16" | | |
| Marion Forks (Linn County) | 2730 | From 12/28 To 1/29 | 15.00" | | |
| Marks Creek (Crook County) | 4540 | From 1/7 To 1/30 | 5.00" | | |
| McKenzie (Lane County) | 5000 | From 8/8 To 2/1 | 48.12" | | |
| Moss Springs (Union County) | 5850 | From 9/11 To 1/30 | 19.32" | | |
| Mt. Hood Test Site (Clackamas County) | 5400 | From 11/15 To 2/1 | 51.63" | | |
| Mt. Howard (Wallowa County) | 7910 | From 8/30 To 1/27 | 19.08" | | |
| Mud Ridge (Clackamas County) | 3800 | From 12/27 To 1/29 | 19.92" | | |
| New Crescent Lake (Klamath County) | 4800 | From 9/20 To 1/30 | 22.20" | | |
| Quartz (Lake County) | 6300 | From 12/27 To 1/30 | 4.68" | | |
| Railroad Overpass (Lane County) | 2750 | From 12/27 To 1/30 | 10.20" | | į |
| Red Hill (Hood River County) | 4400 | From 9/6 To 1/30 | 57.00" | | |
| Roaring River (Lane County) | 4900 | From 12/26 To 1/28 | 13.80" | | |
| Rock Springs (Grant County) | 5100 | From 1/4 To 1/29 | 3.60" | | |
| Salt Creek Falls (Lane County) | 4000 | From 12/27 To 1/30 | 7 14.88" | | |
| Santiam Junction (Lane County) | 3750 | From 12/28 To 1/29 | 3 13.56" | | |
| Seven Mile (Klamath County) | 5725 | From 7/11 To 1/30 | 37.56" | | |
| Silver Creek (Lake County) | 5720 | From 9/18 To 1/31 | 13.92" | | |

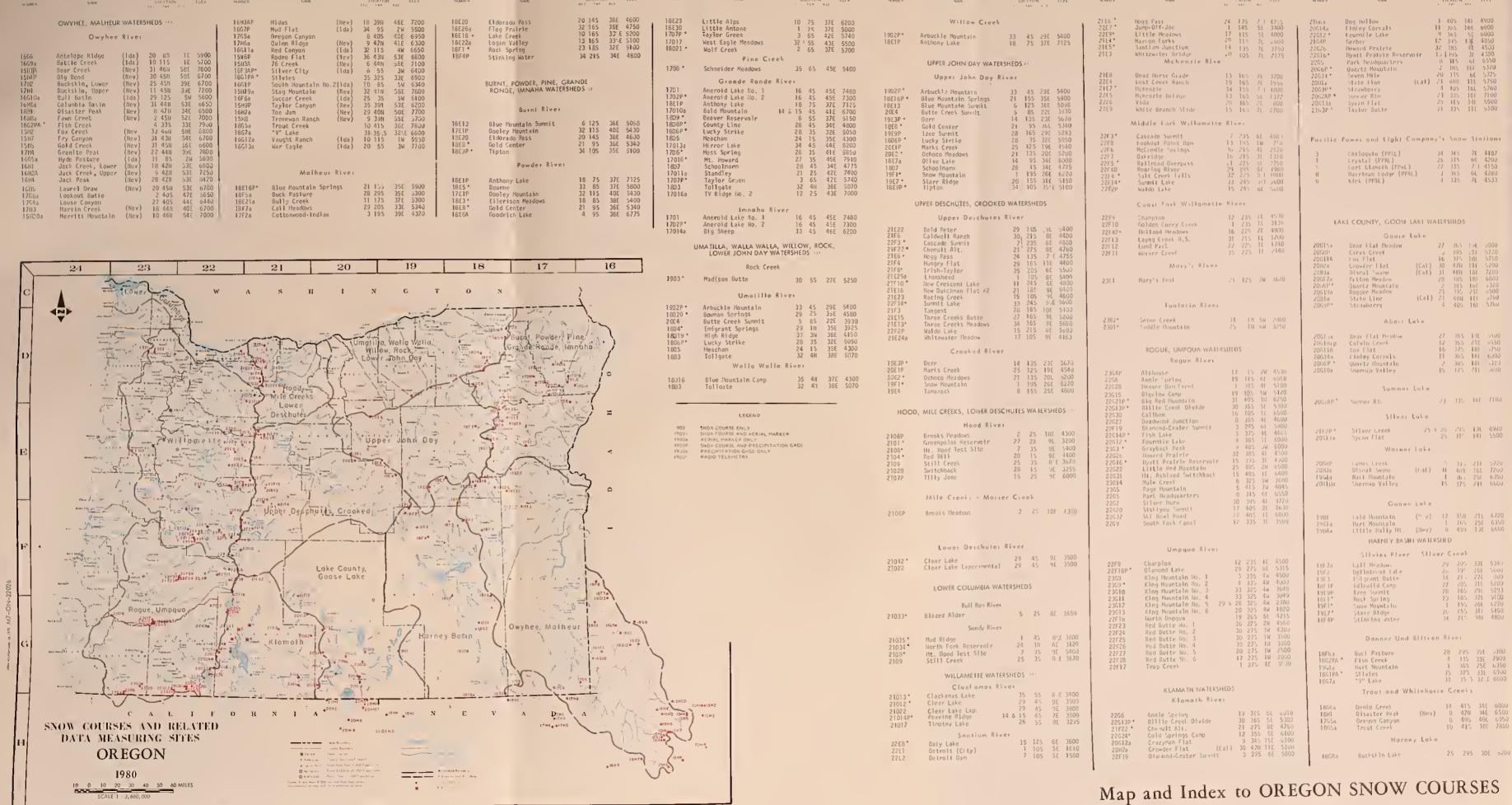
⁽a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

FEBRUARY 1, 1980

| RECIPITATION (Inches) | 7 | CURRENT IN | FORMATION | PAST R | ECORD |
|--|-----------|-----------------------|--------------------|-----------|-----------|
| DRAINAGE BASIN and PRECIPITATION GAGE LOCATION | ELEVATION | Date of Reading | Precip- itation | Last Year | Average C |
| Starr Ridge (Grant County) | 5156 | From 1/2 To 1/31 | 2.16" | | |
| Summit Lake (Klamath County) | 5600 | From 10/18 To 1/30 | 34.56 | | |
| Taylor Butte (Klamath County) | 5040 | From 1/2 To 1/29 | 6.72" | | |
| Taylor Green (Baker County) | 5740 | From 11/1 To 1/30 | 12.96" | | |
| Three Creek Meadows (Deschutes County) | 5650 | From 6/11 To 1/28 | 24.96" | | |
| Tipton (Baker County) | 5100 | From 12/26 To 1/30 | 4.44" | | |
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(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.







The Following Organizations Cooperate in the Oregon Snow Survey Work

STATE Idaho Cooperative Snow Surveys Nevada Cooperative Snow Surveys . Oregon State University Oregon Department Of Water Resources Soil and Water Conservation Districts of Oregon Douglas County Water Resources Survey FEDERAL Department of Agriculture Cooperative Extension Service Forest Service Soil Conservation Service Department of Commerce NOAA, National Weather Service Department of the Interior Bonneville Power Administration Bureau of Land Management Bureau of Revlamation Fish and Wildlife Service Geological Survey Department of National Defense Corps of Army Engineers PUBLIC UTILITIES Pacific Power and Light Company Portland General Electric Company California-Pacific National MUNICIPALITIES City of Baker City of La Grande City of Portland City of The Dalles City of Walla Walla IRRIGATION DISTRICTS Arnold Irrigation District Associated Ditch Companies Burnt River Irrigation District Central Oregon Irrigation District East Fork Irrigation District Grants Pass Irrigation District Hood River Irrigation District Jordan Valley Irrigation District Juniper Flat Irrigation District Lakeview Water Users, Incorporated Medford Irrigation District Middle Fork Irrigation District North Board of Control - Owyhee Project North Unit Irrigation District Ochoco Irrigation District Rogue River Valley Irrigation District South Board of Control - Owyhee Project Squaw Creek Irrigation District Talent Irrigation District Tumalo Project Vale - Oregon Irrigation District Warmsprings Irrigation District PRIVATE ORGANIZATIONS The Crag Rats, Hood River, Oregon

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
1220 S.W. THIRD AVE.
PORTLAND, OREGON 97204

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"The Conservation of Water begins

with the Snow Survey"

domestic and municipal water

water supply for irrigation,

necessary for forecasting

Furnishes the basic data

supply, hydro-electric power

generation, navigation,

mining and industry